

CHUANGJIE FURNITURE MANUFACTURING CO., LTD
NO.18, JU KENG STREET, DA SHUI KENG VILLAGE, GUAN LAN TOWN, SHEN ZHEN CITY,
GUANG DONG PROVINCE, CHINA

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

Sample Description : HIGH BACK OFFICE MESH CHAIR
Style / Item No. : D00205H
Buyer : NORTH AMERICA, EUROPE
Supplier & Manufacturer : CHUANGJIE FURNITURE MANUFACTURING CO., LTD
Country of Origin : CHINA
Country of Destination : NORTH AMERICA, EUROPE
Test Performed : Selected test(s) as requested by applicant
Sample Receiving Date : Nov 24, 2006
Sample Resubmission Date : Dec 20, 2006
Test Performing Date : Nov 24, 2006 to Dec 30, 2006
Test Result(s) : For further details, please refer to the following page(s)

Signed for and on behalf of
SGS-CSTC Co., Ltd.

Koby Liang
Engineer

The hard copy of this (these) report(s) shall prevail in case of discrepancy between the hard copy and the soft copy.

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or attached. Said Conditions are also available upon request or are accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 90 days only. This Test Report shall not be reproduced except in full, without written approval of the Company.

Test Conducted: ANSI/BIFMA X5.1 -2002

Test Item	Test Method	Test requirements	Test Result	Rating
Back Strength Test - Static - Type I (Functional Load)	ANSI/BIFMA X5.1 -2002 Clause 5.4	No loss of serviceability when 890N (200lbs.) is applied for 1 min. Applied 90° to the back at 16in. above the seat.	No failure	Pass
Back Strength Test - Static - Type I (Proof Load)	ANSI/BIFMA X5.1 -2002 Clause 5.4	No sudden and major change in the structural integrity (loss of serviceability is acceptable) when 1334N (300lbs.) is applied for 1 min. Applied 90° to the back at 16in. above the seat.	No failure	Pass
Back Strength Test - Static - Type II & III (Functional Load)	ANSI/BIFMA X5.1 -2002 Clause 6.4	No loss of serviceability when 667N (150lbs.) is applied for 1 min. Applied 90° to the back at 16in. above the seat.	No failure	Pass
Back Strength Test - Static - Type II & III (Proof Load)	ANSI/BIFMA X5.1 -2002 Clause 6.4	No sudden and major change in the structural integrity (loss of serviceability is acceptable) when 1112N (250lbs.) is applied for 1 min. Applied 90° to the back at 16in. above the seat.	No failure	Pass
Base Test – Static	ANSI/BIFMA X5.1 -2002 Clause 7	No sudden and major change in the structural integrity under 11,120N (2500lbs.) compressions for 1 min. The weight is then removed and reapplied for 1 min. The center column may not touch the test platform during load applications.	No failure	Pass
Drop Test – Dynamic (Functional Load)	ANSI/BIFMA X5.1 -2002 Clause 8.4	No loss of serviceability when 102kg (225lbs.) weight free falls from 6in. height to the center of the seat.	No failure	Pass
Drop Test Dynamic (Proof Load)	ANSI/BIFMA X5.1 -2002 Clause 8.4	No sudden and major change in the structural integrity (loss of serviceability is acceptable) when 136kg (300lbs.) weight free falls from 6in. height to the center of the seat.	No failure	Pass
Swivel Test - Cyclic	ANSI/BIFMA X5.1 -2002 Clause 9	No loss of serviceability after 60,000cycles of rotation (360°) under a 102kg (225lbs.) load on the seat at its max. height. Seat shall then withstand another 60,000cycles of rotation at its lowest seating position. Total 120,000cycles.	No failure	Pass
Tilt Mechanism Test – Cyclic – Type I & II	ANSI/BIFMA X5.1 -2002 Clause 10	No loss of serviceability after 300,000cycles under a 102kg (225lbs.) load to the center of the seat	No failure	Pass
Impact Test – Cyclic	ANSI/BIFMA X5.1 -2002 Clause 11.3	No loss of serviceability in 100,000cycles impact. A weight of 57kg (125lbs.) free falls onto the seat from 1 in. height.	No failure	Pass
Front Corner Load Ease Test –Cyclic – off Center	ANSI/BIFMA X5.1 -2002 Clause 11.4	No loss of serviceability after load each seat front corner with 734N (165 lbs.) for 20,000 cycles, total 40,000 cycles. Note: this test is done after “Impact test” on the same sample.	No failure	Pass

To be continued...

The hard copy of this (these) report(s) shall prevail in case of discrepancy between the hard copy and the soft copy.

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or attached. Said Conditions are also available upon request or are accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 90 days only. This Test Report shall not be reproduced except in full, without written approval of the Company.

Test Item	Test Method	Test requirements	Test Result	Rating
Stability Test – Rear Stability	ANSI/BIFMA X5.1 -2002 Clause 12.3	A 79kg (173lbs.) weight is placed to the seat center (strapped as Fig. 12a). Obstruct the chair casters/legs with 13mm (1/2in.) obstacle. A tipping force is applied to the chair back until the total weight is transferred to the rear support members. The tipping force shall not be less than: Type I and II –89N (20 lbs.) Type III –156N (35 lbs.)	The tipping force is more than 89N (Type I)	Pass
Stability Test – Front Stability	ANSI/BIFMA X5.1 -2002 Clause 12.4	The chair is obstructed with a 13mm (1/2 in.) obstruction to the chair casters/legs. A downward load of 600N (135lbs.) is centered 60mm (2.4in.) from the seat front center edge. The seat shall withstand a 20N (4.5lbf.) horizontally from the front seat edge without tipping.	No tipping	Pass
Arm Strength Test Vertical - Static (Functional Load)	ANSI/BIFMA X5.1 -2002 Clause 13.4	No loss of serviceability when 890N (200lbs.) is applied for 1 min. The vertical load is uniformly applied along a 127mm (5in.) length at the apparent weakest point.	No failure	Pass
Arm Strength Test Vertical-Static (Proof Load)	ANSI/BIFMA X5.1 -2002 Clause 13.4	No sudden and major change in the structural integrity (loss of serviceability is acceptable) when 1334N (300lbs.) is applied for 1 min. The vertical load is uniformly applied along a 127mm (5 in.) length at the apparent weakest point.	No failure	Pass
Arm Strength Test Horizontal –Static (Functional Load)	ANSI/BIFMA X5.1 -2002 Clause 14.4	No loss of serviceability when 445N (100lbs.) for 1 min. is applied horizontally outward to the armrest at the most forward point of the armrest.	No failure	Pass
Arm Strength Test Horizontal - Static (Proof Load)	ANSI/BIFMA X5.1 -2002 Clause 14.4	No sudden and major change in the structural integrity (loss of serviceability is acceptable) when 667N (150lbs.) for 1 min. is applied horizontally outward to the armrest at the most forward point of the armrest.	No failure	Pass
Back Durability Test – Cyclic – Type I	ANSI/BIFMA X5.1 -2002 Clause 15	No loss of serviceability in 120,000 cycles with a 102kg (225lbs.) in the center of the seat and a 445N (100lbf.) 90° to the center of the chair back. For chairs with a back width greater than 406mm (16in.), test at the center of chair back for 80,000cycles and then 102mm (4in.) off-center 40,000 cycles, half to each side.	No failure	Pass
Back Durability Test – Cyclic – Type II & III	ANSI/BIFMA X5.1 - 2002 Clause 16	No loss of serviceability in 120,000 cycles with a 102kg (225lbs.) in the center of the seat and a 334N (75lbf.) 90° to the center of the chair back. For chairs with a back width greater than 406mm (16in.), test at the center of chair back for 80,000cycles and then 102mm (4in.) off-center 40,000 cycles, half to each side.	No failure	Pass

To be continued...

The hard copy of this (these) report(s) shall prevail in case of discrepancy between the hard copy and the soft copy.

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or attached. Said Conditions are also available upon request or are accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 90 days only. This Test Report shall not be reproduced except in full, without written approval of the Company.

Test Item	Test Method	Test requirements	Test Result	Rating
Caster / Chair Base Durability Test for Pedestal Base Chair	ANSI/BIFMA X5.1 -2002 Clause 17.1	No loss of service after 2,000cycles over a hard surface with 3 obstacles and 98, 000cycles over a smooth hard surface without obstacles under a 102kg (225lbs.) load on the seat. Test stroke is 762mm (30in.) minimum. The caster should not separate under 22N (5lbs.) pulling force in line with the caster stem after the cycling test.	No failure	Pass
Caster / Chair Base Durability Test for Chairs with Legs	ANSI/BIFMA X5.1 -2002 Clause 17.2	No loss of service after 2,000cycles over a hard surface with 2 obstacles and 98, 000cycles over a smooth hard surface without obstacles under a 102kg (225lbs.) load on the seat. Test stroke is 762mm (30in.) minimum. The caster should not separate under 22N (5lbs.) pulling force in line with the caster stem after the cycling test.	NA	----
Leg Strength Test -Front Load (Functional Load)	ANSI/BIFMA X5.1 -2002 Clause 18.3	No loss of serviceability when a force of 334N (75lbf.) is applied to each front leg individually for 1 minute.	NA	----
Leg Strength Test-Front Load (Proof Load)	ANSI/BIFMA X5.1 -2002 Clause 18.3	No sudden and major change in the structural integrity (loss of serviceability is acceptable) when a force of 556N (125lbf.) is applied to each front leg individually for 1 minute.	NA	----
Leg Strength Test -Side Load (Functional Load)	ANSI/BIFMA X5.1 -2002 Clause 18.4	No loss of serviceability when a force of 334N (75lbf.) is applied once to each front and rear leg individually for 1 minute.	NA	----
Leg Strength Test -Side Load (Proof Load)	ANSI/BIFMA X5.1 -2002 Clause 18.4	No sudden and major change in the structural integrity (loss of serviceability is acceptable) when a force of 512N (115lbf.) is applied once to the front and rear leg individually for 1 minute.	NA	----
Footrest Durability Test	ANSI/BIFMA X5.1 -2002 Clause 19	No loss of serviceability after 50,000cycles of a 890N (200lbf) load vertical along 102mm (4in.) length of the footrest at the apparent weakest point of the structure.	NA	----
Arm Durability Test-Cyclic	ANSI/BIFMA X5.1 -2002 Clause 20	No structural breakage or loss of serviceability when a force of 400N (90lbf.) is applied to each arm at a 10° angle ±1° for 60,000cycles	No failure	Pass
Out Stop Tests for Chairs with Manually Adjustable Seat Depth	ANSI/BIFMA X5.1 -2002 Clause 21	Place a 70 kg (154 lb) rigid mass in the center of the seat. Hold the seat at its most position. A cable is attached to the most rigid point of the vertical centerline of the seat. Hang a weight of 25 kg (55 lb) on the opposite end of the cable. Release the weight so it can drag the seat move forward rapidly and impact	NA	----
Tablet Arm Static Load Test	ANSI/BIFMA X5.1 -2002 Clause 22	Apply a load of 68 kg (150 lb) at the apparent weakest position for 5 minutes and remove the load. No sudden and major change in the chair when the application of the load.	NA	----

To be continued...

The hard copy of this (these) report(s) shall prevail in case of discrepancy between the hard copy and the soft copy.

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or attached. Said Conditions are also available upon request or are accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 90 days only. This Test Report shall not be reproduced except in full, without written approval of the Company.

Test Item	Test Method	Test requirements	Test Result	Rating
Tablet Arm Load Ease Test - Cyclic	ANSI/BIFMA X5.1 -2002 Clause 23	No loss of serviceability to the unit after loading the tablet surface with a weight of 35 kg (77 lb) for a total 100,000 cycles.	NA	----

Remark:

- 1) NA: Not applicable;
- 2) Type of chair:
 - Type I – tilt chair: a chair with a seat tilts with a counterbalancing force;
 - Type II – fixed seat angle, tilting backrest: a chair that provides a fixed angle with a tilting backrest.
 - Type III – fixed seat angle, fixed backrest: a chair that provides a fixed seat angle with a fixed backrest.
- 3) Photo appendix is included.

End of Report

The hard copy of this (these) report(s) shall prevail in case of discrepancy between the hard copy and the soft copy.

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or attached. Said Conditions are also available upon request or are accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 90 days only. This Test Report shall not be reproduced except in full, without written approval of the Company.