

**Test Report No. 7191046786-MEC12-CSL**  
**dated 11 Dec 2012**

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**SUBJECT:**

Testing of Chair submitted by Merryfair Chair System Sdn Bhd on 22 Oct 2012 and 21 Nov 2012.

**TESTED FOR:**

Merryfair Chair System Sdn Bhd  
No 2, Jalan Koporat 1/KU9,  
Taman Perindustrian Meru,  
42200 Klang, Selangor,  
Malaysia

**DATE OF TEST:**

22 Oct 2012 to 10 Dec 2012

**DESCRIPTION OF SAMPLE:**

One complete set of Chair as shown in the photograph was received. The following descriptions were given by the client:

Model	:	Kopi O
Product Type	:	Office Chair
Country of Origin	:	Malaysia
Classification	:	Type III

**METHOD OF TEST:**

As requested by the client, the tests were conducted in accordance with the following standard:

ANSI/BIFMA X5.1 – 2011 "General-Purpose Office Chairs – Tests"

The tests were conducted at TÜV SÜD PSB furniture test laboratory, a FIRA (UK) Accredited Testing Laboratory, located at No.1 Science Park Drive. Singapore 118221.



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**TÜV**<sup>®</sup>



**RESULTS:**

Clause	Test	Parameters	Results	Requirement
5	Back Strength Test – Static – Type I	Functional load = Proof load = Duration =	N/A	Functional load: No loss of serviceability  Proof Load: No sudden & major change in structural integrity. Loss of serviceability is acceptable
6	Back Strength Test – Static – Type III	Functional load = 667 N Proof load = 1112 N Duration = 1 min	Passed (see remark 1)	No sudden & major change in the structural integrity of the base.
7	Base Test – Static	Loading force = Duration = Cycles =	N/A	Functional load: No loss of serviceability  Proof Load: No sudden & major change in structural integrity. Loss of serviceability is acceptable
8	Drop Test – Dynamic	Functional load = 102 kg Proof load = 136 kg Drop ht = 152 mm	Passed	No loss of serviceability to the tilt mechanism
9	Swivel Test – Cyclic	Seat load = Total cycles = Rate =	N/A	No loss of serviceability
10	Tilt Mechanism Test – Cyclic	Seat load = Cycles = Rate =	N/A	No loss of serviceability
11	Seating Durability test – Cyclic - Impact Test	Seat load = 57 kg Drop ht = 30 mm Cycles = 100000 Rate = 10 - 30 cycles/min	Passed	No loss of serviceability
	- Front Corner Load-Ease Test – Cyclic – Off Center	Seat load = 734 N Cycle = 40000 Rate = 10 - 30 cycles/min	Passed	



**RESULTS:**

Clause	Test	Parameters	Results	Requirement
12	Stability Tests - a) Rear Stability i) Type I ii) Type III	Loading = Loading = 6 disks Horizontal force = 150 N	N/A Passed	Chair shall not tip over.
	b) Front Stability	Vertical Load = 600 N Horizontal force = 20 N	Passed	
13	Arm Strength Test – Vertical – Static	Functional load = Proof load = Duration =	N/A	Functional load: No loss of serviceability. For a height adjustable arm, it must hold the position within 6mm.  Proof Load: No sudden & major change in structural integrity. For a height adjustable arm, it must not has a sudden drop in height of greater than 25mm. Loss of serviceability is acceptable
14	Arm Strength Test – Horizontal – Static	Functional load = Proof load = Duration =	N/A	Functional load: No loss of serviceability.  Proof Load: No sudden & major change in structural integrity. Loss of serviceability is acceptable



**RESULTS:**

Clause	Test	Parameters	Results	Requirement
15	Back Durability Test – Cyclic – Type I	Seat weight = Loading force = Cycles = Rate =	N/A	No loss of serviceability
16	Back Durability Test – Cyclic – Type III	Seat weight = 102 kg Loading force = 334 N Cycles = 120000 Rate = 10 - 30 cycles/min	Passed	
17	Caster / Chair Base Durability Test – Cyclic - Pedestal Base Chairs - Chairs with Legs	Seat weight = Cycles = Rate =	N/A N/A	
	Caster Retention for Each Caster	Applied force =	N/A	No part of castor shall separate from base
18	Leg Strength Test – Front & Side Application - Front Load Test	Functional load = 334 N Proof load = 503 N Duration = 1 min (each leg)	Passed	Functional load: No loss of serviceability  Proof Load: No sudden & major change in structural integrity. Loss of serviceability is acceptable
	- Side Load Test	Functional load = 334 N Proof load = 503 N Duration = 1 min (each leg)	Passed	
19	Footrest Static Load Test – Vertical	Functional Load, Force, F1 =	N/A	Functional Load: No loss of serviceability or sudden loss of footrest height.  Proof Load: No sudden & major change in structural integrity. Loss of serviceability is acceptable
		Footrest adjustment, Force F1 = Force, F2 = Duration =	N/A	
		Proof Load, Force = Duration =	N/A	



**RESULTS:**

Clause	Test	Parameters	Results	Requirement
20	Footrest Durability Test – Vertical – Cyclic	Loading force = Cycles = Rate =	N/A	No loss of serviceability. Adjustable footrest that move more than 25mm in the first 500 cycles shall be considered to have lost their serviceability.
21	Arm Durability Test – Cyclic	Applied force = Cycles = Rate =	N/A	No loss of serviceability.
22	Out Stop Tests for Chairs with Manually Adjustable Seat Depth	Seat weight = Loading weight = Cycles =	N/A	
23	Tablet Arm Static Load Test	Applied load = Duration =	N/A	No sudden and major change in the structural integrity of the chair. After test, tablet arm must allow egress from the unit; other losses of serviceability are acceptable
24	Tablet Arm Load Ease Test – Cyclic	Force = Cycles = Rate =	N/A	No loss of serviceability

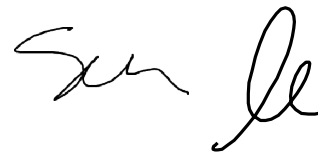
**REMARKS:**

1. Additional loading of 102 kg was placed on seat pan of sample during 'Backrest Strength Test – Static – Type III' test, as requested by client.
2. N/A: Not applicable as features not available on chair.

  
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Product Manager  
Consumer & Safety Products  
Mechanical Centre

**APPENDIX:**





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July 2011

