Test Report No. 7191209042-EEC19_CR01
(dated 15 May, 2019)

PSB Singapore

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Client	:	BENITHEM SDN BHD PTD 10710, JALAN KG AIR PUTIH, JALAN SAWAH, 81500 PEKAN NANAS, JOHOR, MALAYSIA ATTN: TAN CHIN TECK
Date Received	:	RECEIVED ON 25/04/2019
Test Period	:	FROM 25/04/2019 TO 15/05/2019
Sample Description	:	OFFICE CHAIR
Model No	:	B-XIMPLE
Country Of Origin	:	MALAYSIA
Manufacturer	:	BENITHEM SDN BHD

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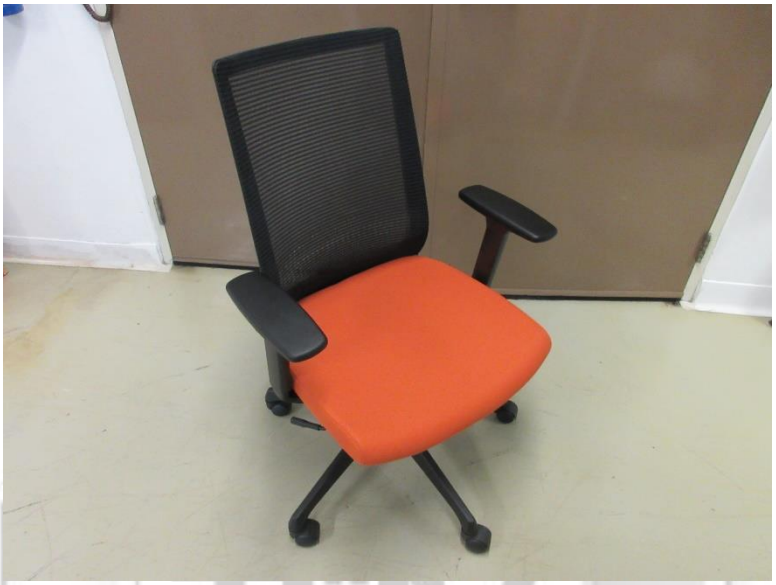
SAMPLE PHOTO


EXECUTIVE SUMMARY:

The sample(s) **MEETS** the following requirement(s):

- The requirement of ANSI/BIFMA X5.1-2017 General-Purpose Office Chairs - Tests

For any concern or technical Inquiries, please contact

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TEST RESULT(S):

Clause	Test	Parameters	Results	Requirement
5	Back Strength Test – Static – Type I & II	Functional load = 667 N Proof load = 1,001 N Duration = 1 min	Pass	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 = 1,001 N Duration = 1 min	Pass	
7	Drop Test – Dynamic	Highest seat position: Functional load = 102 kg Proof load = 136 kg Drop ht = 152 mm Lowest seat position: Functional load = 102 kg Proof load = 136 kg Drop ht = 152 mm	Pass	Functional load: No loss of serviceability Proof Load: No sudden & major change in structural integrity. Loss of serviceability is acceptable
8	Swivel Test – Cyclic	Seat load = 122 kg Total cycles = 120,000 • 60,000 highest position • 60,000 lowest position Rate = 5 - 15 cycles/min	Pass	No loss of serviceability
9	Tilt Mechanism Test – Cyclic	Chair height: Mid-point Seat load = 109 kg Cycles = 300,000 Rate = 10 - 30 cycles/min	Pass	No loss of serviceability to the tilt mechanism
10	Seating Durability Tests – Cyclic a) Impact Test	Chair height: Mid-point Unlocked Seat load = 57 kg Drop ht = 36 mm Cycles = 100,000 Rate = 10 - 30 cycles/min	Pass	No loss of serviceability. If applicable, the chair base (center structure) shall not touch the test platform as a result of the impact loads.
	b) Front Corner Load-Ease Test – Cyclic – Off Center	Chair height: Mid-point Seat load = 890 N Cycle = 40,000 Rate = 10 - 30 cycles/min	Pass	

TEST RESULT(S): continued

Clause	Test	Parameters	Results	Requirement
11	Stability Tests: a) Rear Stability	i) Type I & II Loading = 13 disks	Pass	Chair shall not tip over.
		ii) Type III Loading = 6 disks Seat height ≤ 710 mm, Force = 0.1964(1195 - 517) = 133 N	Pass	
	b) Front Stability	Vertical Load = 61kg Horizontal force = 20 N	Pass	
12	Arm Strength Test – Vertical – Static	Functional load = 750 N Duration = 1 min Proof load = 1,125 N Duration = 15 sec	Pass	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
13	Arm Strength Test – Horizontal – Static	Functional load = 445 N Duration = 1 min Proof load = 667 N Duration = 15 sec	Pass	Functional load: No loss of serviceability. Proof Load: No sudden & major change in structural integrity. Loss of serviceability is acceptable
14	Back Durability Test – Cyclic – Type I	Seat weight = 109 kg Loading force = 445 N Cycles = 120,000 Rate = 10 - 30 cycles/min	Pass	No loss of serviceability
15	Back Durability Test – Cyclic – Type II & III	Seat weight = 109 kg Loading force = 334 N Cycles = 120,000 Rate = 10 - 30 cycles/min	Pass	
16	Caster / Chair Base Durability Test – Cyclic - Pedestal Base Chairs	Seat weight = 122 kg Cycles: 2,000 (Obstacles) 98,000 (No obstacles) Rate = 10 ± 2 cycles/min	Pass	
	- Non-pedestal chairs with casters		Not Applicable	
	Caster Retention for each caster	Applied force = 22N	Pass	No part of caster shall separate from base

TEST RESULT(S): continued

Clause	Test	Parameters	Results	Requirement
17	Leg Strength Test – Front & Side Application - Front Load Test	Functional load = 334N Proof load = 503N Duration = 1 min (each front leg)	Pass	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 = 334N Proof load = 503N Duration = 1 min (front and rear leg)	Pass	
18	Footrest Static Load Test – Vertical	Functional Load, Force, F1 = Footrest adjustment, Force F1 = Force, F2 = Duration =	Not Applicable	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
		Proof Load, Force = Duration =	Not Applicable	
19	Footrest Durability Test – Vertical – Cyclic	Loading force = Cycles = Rate =	Not Applicable	No loss of serviceability. Adjustable footrest that move more than 25mm in the first 500 cycles shall be considered to have lost their serviceability.
20	Arm Durability Test – Cyclic	Applied force = 400 N Cycles = 60,000 Rate = 10 - 30 cycles/min	Pass	No loss of serviceability.
21	Out Stop Tests for Chairs with Manually Adjustable Seat Depth	Seat weight = 74 kg Loading weight = 25 kg Cycles = 25	Not Applicable	
22	Tablet Arm Static Load Test	Applied load = Duration =	Not Applicable	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
23	Tablet Arm Load Ease Test – Cyclic	Force = Cycles = Rate =	Not Applicable	No loss of serviceability

TEST RESULT(S): continued

Clause	Test	Parameters	Results	Requirement
24	Structural Durability Test – Cyclic	Seat weight = 109 kg Force = 334 N Cycles = 25,000 Rate = 10 - 30 cycles/min	Not Applicable	No loss of serviceability.
Appendix C	Base Test – Static	Loading force = 11.1 kN Duration = 1 min Cycles = 2	Pass	No sudden & major change in the structural integrity of the base.
Appendix H	Simultaneous Side Legs Strength Test	Force = 334 N Duration = 1 min (front and rear leg simultaneously)	Pass	No loss of serviceability.

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