

EMECO INDUSTRIES INC TEST REPORT

SCOPE OF WORK

ANSI/BIFMA X5.1-2017 GENERAL PURPOSE OFFICE CHAIRS testing on Alfi Chair

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TEST REPORT FOR EMECO INDUSTRIES INC

Report No.: 103925042GRR-001

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SECTION 1

CLIENT INFORMATION

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SECTION 2**SUMMARY AND CONCLUSION**

Date Received: 22-Apr-2019
 Dates Tested: 22-Apr-2019 to 30-Apr-2019

DESCRIPTION OF SAMPLES

Part Description: Alfi Chair
 Condition of Samples: New

WORK REQUESTED/APPLICABLE DOCUMENTS

ANSI/BIFMA X5.1-2017 GENERAL PURPOSE OFFICE CHAIRS
 Intertek quote Qu-00973333

CONCLUSION

TEST	RESULTS
7. Drop Test Dynamic	CONFORMING
10. Seating Durability Tests – Cyclic	CONFORMING
17. Leg Strength Test – Front and Side Application	CONFORMING

SAMPLE DISPOSITION

After test completion, samples remain at Intertek.

TEST EQUIPMENT:

ASSET #	EQUIPMENT	CAL DATE	NEXT DUE
138012	Scale/0-1,000#	10/15/2018	10/15/2019
138039.1	WEIGHT BAG	VBU	VBU
138039.2	WEIGHT BAG	VBU	VBU
138042	2 Station Seat Impact	VBU	VBU
138388	Encoder	CBU	CBU
138427	1000LB LOAD CELL WITH DISPLAY	5/29/2018	5/29/2019
138500.06	Scientific Stopwatch	08/27/2018	08/27/2019
138519	48" STRAIGHT-EDGE	12/17/2018	12/17/2019
138916.2	TIMING BOX	VBU	VBU

SECTION 3

7. DROP TEST – DYNAMIC:

Date Received: 22-Apr-2019
 Date Tested: 30-Apr-2019
 Location Tested: Intertek Kentwood, MI

DESCRIPTION OF SAMPLES:

Part Description: Alfi Chair
 Condition of Samples: New

TEST PROCEDURE:

Test Method: Per ANSI/BIFMA X5.1-2017 Test No. 7:
 Functional Load: 225 lbs.
 Proof Load: 300 lbs.
 Drop Height: 6"

Number of Samples Tested: One (1)

ACCEPTANCE CRITERIA:

Per ANSI/BIFMA X5.1-2017 Test No. 7:

Functional Load: There shall be no loss of serviceability.

Proof Load: There shall be no sudden and major change in the structural integrity of the product. Loss of serviceability is acceptable.

RESULTS:

SAMPLE ID	DROP WEIGHT	RESULTS
1	Functional Load: 225 lbs.	Conforming
	Proof Load: 300 lbs.	Conforming

The submitted sample met the acceptance criteria of the test described above. Refer to the following page for photograph.



Drop Test – Dynamic

10. SEATING DURABILITY TESTS – CYCLIC:

Date Received: 22-Apr-2019
 Date Tested: 24-Apr-2019 to 30-Apr-2019
 Location Tested: Intertek Kentwood, MI

DESCRIPTION OF SAMPLES:

Part Description: Alfi Chair
 Condition of Samples: New

TEST PROCEDURE:

Test Method: Per ANSI/BIFMA X5.1-2017 Test No. 10:

Test No. 10.3 Impact Test
 Bag Diameter: 16”
 Bag Weight: 125 lbs.
 Number of Cycles: 100,000
 Height of Drop: 1.4”
 Cycles per Minute: 10 to 30

Test No. 10.4 Front Corner Load-Ease Test – Cyclic – Off-center
 Bag Diameter: 8”
 Bag Weight: 200 lbs.
 Number of Cycles Required: 20,000 to each Front Corner
 Number Cycles: 10 to 30

Number of Samples Tested: One (1)

ACCEPTANCE CRITERIA:

Per ANSI/BIFMA X5.1-2017 Test No. 10:

There shall be no loss of serviceability to the chair after completion of both the Impact and Load Ease Tests. If applicable, the chair base (center structure) shall not touch the test platform as a result of the impact loads.

RESULTS:

SAMPLE NO.	CYCLES	RESULTS
1	100,000	Conforming

Left Front Corner	20,000	Conforming
Right Front Corner	20,000	Conforming

The submitted sample met the acceptance criteria of the test described above. Refer to the following pages for photographs.



Impact Test



Load Ease Test

17. LEG STRENGTH TEST – FRONT AND SIDE APPLICATION:

Date Received: 22-Apr-2019
 Date Tested: 30-Apr-2019
 Location Tested: Intertek Kentwood, MI

DESCRIPTION OF SAMPLES:

Part Description: Alfi Chair
 Condition of Samples: New

TEST PROCEDURE:

Test Method: Per ANSI/BIFMA X5.1-2017 Test No. 17:

Test No. 17.3 Front to Rear Leg Application:
 Functional Load: 75 lbf. (Load Each Leg)
 Proof Load: 113 lbf. (Load Each Leg)

Test No. 17.4 Side Load Application:
 Functional Load: 75 lbf. (Load Each Leg)
 Proof Load: 113 lbf. (Load Each Leg)

Number of Samples Tested: One

ACCEPTANCE CRITERIA:

Per ANSI/BIFMA X5.1-2017 Test No. 17:

Functional Load: No structural breakage or loss of serviceability, including stacking if applicable.

Proof Load: No sudden and major change in the structural integrity of the product. Loss of serviceability is acceptable.

RESULTS:

SAMPLE ID	LOAD APPLICATION	FUNCTIONAL	RESULTS	PROOF	RESULTS
1	Side to Side (Rear Side)	75 lbf.	Conforming	113 lbf.	Conforming
	Side to Side (Front Side)	75 lbf.	Conforming	113 lbf.	Conforming
	Front to Rear (Left Side)	75 lbf.	Conforming	113 lbf.	Conforming
	Front to Rear (Right Side)	75 lbf.	Conforming	113 lbf.	Conforming

The submitted sample met the acceptance criteria of the test described above. Refer to the following pages for photographs.



Leg Strength Test – Front Load



Leg Strength Test – Side Load

SECTION 4

REVISIONS MADE TO TEST REPORT:

DATE	REVISION DESCRIPTION	REVISED BY	REVISED BY
02-May-2019	Initial release.	Lynwood Pearson	<i>Lynwood Pearson</i>