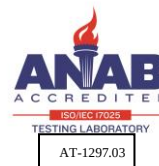




Test Report
4791665318
UL Solutions
72 West 64th Street
Suite 120
Holland, MI 49423
<https://www.ul.com/industries/products-and-components/furniture>



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Requester:	National Public Seating 149 Entin Road Clifton, NJ 07014
Contact Name:	Sherri Miller
Dates Tested:	05/09/25 – 06/13/25
Date Submitted:	06/26/25
Technician:	Ron Day, Matt DeKock
UL Order / Project Number:	15684548 / 4791665318

Scope: To evaluate the Various (Science-Elephant Z-Stool) Stools, supplied by National Public Seating, by subjecting them to the following tests:

Requested Tests:

<u>Test Name</u>	<u>Requirement</u>
Backrest Strength - Static - Type III	ANSI/BIFMA X5.1-2017(R2022), Section 6
Drop Test - Dynamic	ANSI/BIFMA X5.1-2017(R2022), Section 7
Seating Durability Tests – Cyclic	ANSI/BIFMA X5.1-2017(R2022), Section 10
Stability Tests	ANSI/BIFMA X5.1-2017(R2022), Section 11
Backrest Durability Test - Cyclic - Type II and III	ANSI/BIFMA X5.1-2017(R2022), Section 15
Leg Strength Test – Front and Side Application	ANSI/BIFMA X5.1-2017(R2022), Section 17
Footrest Static Load Test - Vertical	ANSI/BIFMA X5.1-2017(R2022), Section 18
Footrest Durability Test – Vertical – Cyclic	ANSI/BIFMA X5.1-2017(R2022), Section 19
Structural Durability Test	ANSI/BIFMA X5.1-2017(R2022), Section 24

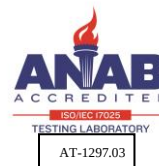
Product Description:

<u>Specimen</u>	<u>Description</u>	<u>Received</u>	<u>Condition</u>	<u>Supplier</u>
8446806	Stool – Model 6624	05/08/25	New	National Public Seating
8446807	Stool – Model 6618	05/08/25	New	National Public Seating
8446808	Stool – Model 6600B	05/08/25	New	National Public Seating
8446809	Stool – Model 6618	05/08/25	New	National Public Seating
8546773	Stool – Model 6624	06/04/25	New	National Public Seating

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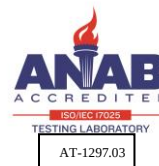
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Summary:

<u>Test Name</u>	<u>Specimen(s)</u>	<u>Results</u>
Backrest Strength - Static - Type III	8446808	Met Requirement
Drop Test - Dynamic	8546773	Met Requirement
Seating Durability Tests – Cyclic	8546773	Met Requirement
Stability Tests	8446808, 8446806, 8446809	Met Requirement
Backrest Durability Test - Cyclic - Type II and III	8446808	Met Requirement
Leg Strength Test – Front and Side Application	8546773	Met Requirement
Footrest Static Load Test - Vertical	8446806	Met Requirement
Footrest Durability Test – Vertical – Cyclic	8446806	Met Requirement
Structural Durability Test	8446806	Met Requirement



Test Results:

Backrest Strength Test - Static - Type II and III:

Testing was performed per ANSI/BIFMA X5.1-2017(R2022), Section 6.

Notes:

- Functional load: 150 lbs. for 1 minute.
- Proof load: 225 lbs. for 1 minute.
- See photo for setup.

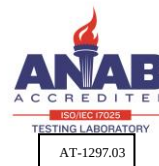


<u>Specimen</u>	<u>Load (lbs.)</u>	<u>Time (sec.)</u>	<u>Observations</u>
8446808	150	60	No loss of serviceability.
	225	60	No sudden and major change in structural integrity.

Requirement:

Functional Load: *There shall be no loss of serviceability to the chair.*

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



Drop Test – Dynamic:

Testing was performed per ANSI/BIFMA X5.1-2017(R2022), Section 7.

Notes:

- Functional load: 225 lbs.
- Proof load: 300 lbs.
- See photo for setup.



<u>Specimen</u>	<u>Chair Height</u>	<u>Load (lbs.)</u>	<u>Observations</u>
8546773	Fixed	225	No loss of serviceability.
	Fixed	300	No sudden and major change in structural integrity.

Requirement:

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 chair.
Loss of serviceability is acceptable.*

Seating Durability Tests – Cyclic:

Testing was performed per ANSI/BIFMA X5.1-2017(R2022), Section 10.

Notes:

- Impact test rate: 15 CPM.
- Load Ease test rate: 20 CPM.
- See photos for Drop Impact and Load Ease setups.



<u>Specimen</u>	<u>Segment</u>	<u>Cycles</u>	<u>Observations</u>
8546773	Impact	0	Test begun.
		100,000	No Loss of serviceability.
	Load Ease	0	Test begun – Left Side.
		20,000	No changes.
		20,000	Test resumed – Right Side.
		40,000	No Loss of serviceability.

Requirement: *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.*

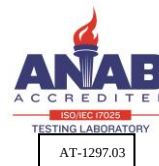
Stability Tests:

Testing was performed per ANSI/BIFMA X5.1-2017(R2022), Section 11.

Notes:

- Rear calculation for Sample 8446808: $1.1(47-23) = 26.4$ lbs.
- See photos for setups.





Stability Tests (continued):

Rear Stability:

<u>Specimen</u>	<u>Observations</u>
8446808	Type III – Unit tipped at 32.8 lbs. Unit passed 26.4 lb. minimum.

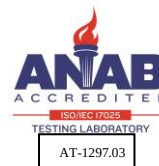
Front Stability:

<u>Specimen</u>	<u>Force to Tip</u>
8446808	Unit tipped at 23.3 lbs. Unit passed 4.5 lb. minimum.
8446806	Unit tipped at 22.3 lbs. Unit passed 4.5 lb. minimum.
8446809	Unit tipped at 26.3 lbs. Unit passed 4.5 lb. minimum.

Requirement:

Rear Stability: *The chair shall not tip over.*

Front Stability: *The chair shall not tip over as the result of the force application.*



Backrest Durability Test - Cyclic - Type II and III:

Testing was performed per ANSI/BIFMA X5.1-2017(R2022), Section 15.

Notes:

- Test rate: 25 CPM.
- See photo for setup.



<u>Specimen</u>	<u>Segment</u>	<u>Cycles</u>	<u>Observations</u>
8446808	Center	0	Test begun.
		120,000	No loss of serviceability.

Requirement: *There shall be no loss of serviceability.*



Leg Strength Test – Front and Side Application:

Testing was performed per ANSI/BIFMA X5.1-2017(R2022), Section 17.

- See photo for setup.



<u>Specimen</u>	<u>Load (lbf)</u>	<u>Time (sec.)</u>	<u>Application</u>	<u>Observations</u>
8546773 / LF	75	60	Side	No loss of serviceability.
8546773 / LF	113	60	Side	No sudden and major change in structural integrity.

Requirement:

Functional Load: Functional load(s) shall cause no loss of serviceability.

Proof Load: Proof load(s) shall cause no sudden and major change in the structural integrity of the chair. Loss of serviceability is acceptable.

Footrest Static Load Test – Vertical:

Testing was performed per ANSI/BIFMA X5.1-2017(R2022), Section 18.

Notes:

- See photo for setup.



<u>Specimen</u>	<u>Force (lbs.)</u>	<u>Time (sec.)</u>	<u>Observations</u>
8446806	100	60	No loss of serviceability or sudden loss of footrest height.
	200	60	No loss of serviceability or sudden loss of footrest height.
	300	60	No sudden and major change in structural integrity.

Requirement:

Functional Load: *There shall be no loss of serviceability or sudden loss of footrest height.*

Proof Load: *The load applied once shall cause no sudden and major change in the structural integrity of the unit. Loss of serviceability is acceptable.*

Footrest Durability Test – Vertical – Cyclic:

Testing was performed per ANSI/BIFMA X5.1-2017(R2022), Section 19.

Notes:

- Test rate: 21 CPM.
- See photo for setup.



<u>Specimen</u>	<u>Cycles</u>	<u>Observations</u>
8446806	0	Begin test.
	50,000	No loss of serviceability.

Requirement: *There shall be no loss of serviceability. Adjustable footrests that move more than 25 mm (1 in.) in the first 500 cycles shall be considered to have lost their serviceability.*

Structural Durability Test:

Testing was performed per ANSI/BIFMA X5.1-2017(R2022), Section 24.

Notes:

- Test rate: 14 CPM.
- See photo for setup.



<u>Specimen</u>	<u>Cycles</u>	<u>Observations</u>
8446806	0	Begin test.
	25,000	No loss of serviceability.

Requirement: *There shall be no loss of serviceability.*