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Dates Tested:	03/27/25 – 03/31/25
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UL Order / Project Number:	15683575 / 4791664464

Scope: To evaluate Heavy Duty Plastic Folding Tables, supplied by National Public Seating Corp, by subjecting it to the following tests:

Requested Tests:

<u>Test Name</u>	<u>Requirement</u>
Stability Under Vertical Load Test	ANSI/BIFMA X5.5-2021, Section 4.3
Concentrated Functional Load Test	ANSI/BIFMA X5.5-2021, Section 5.2
Distributed Functional Load Test	ANSI/BIFMA X5.5-2021, Section 5.3
Concentrated Proof Load Test	ANSI/BIFMA X5.5-2021, Section 5.4
Distributed Proof Load Test	ANSI/BIFMA X5.5-2021, Section 5.5
Top Load Ease Cycle Test	ANSI/BIFMA X5.5-2021, Section 6
Desk Table Unit Drop Test	ANSI/BIFMA X5.5-2021, Section 7
Leg Strength Test	ANSI/BIFMA X5.5-2021, Section 8

Product Description:

The following Heavy Duty Plastic Folding tables were received for testing:

<u>Specimen</u>	<u>Description</u>	<u>Received</u>	<u>Condition</u>	<u>Supplier</u>
8290441	Table Folding (Plastic)-BT2448	03/27/25	New	Nation Public Seating
8297505	Table Folding (Plastic)-BT3060	03/27/25	New	Nation Public Seating
8297506	Table Folding (Plastic)-BT3096	03/27/25	New	Nation Public Seating
8297507	Table Folding (Plastic)-BT1860	03/27/25	New	Nation Public Seating
8297508	Table Folding (Plastic)-BT1896	03/27/25	New	Nation Public Seating

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Summary:

<u>Test Name</u>	<u>Specimen(s)</u>	<u>Results</u>
Stability Under Vertical Load Test	8290441	Met Requirements
	8297505	Met Requirements
	8297506	Met Requirements
	8297507	Met Requirements
	8297508	Met Requirements
Concentrated Functional Load Test	8290441	Met Requirements
	8297506	Met Requirements
	8297508	Met Requirements
Distributed Functional Load Test	8290441	Met Requirements
	8297506	Met Requirements
	8297508	Met Requirements
Concentrated Proof Load Test	8290441	Met Requirements
	8297506	Met Requirements
	8297508	Met Requirements
Distributed Proof Load Test	8290441	Met Requirements
	8297506	Met Requirements
	8297508	Met Requirements
Top Load Ease Cycle Test	8290441	Met Requirements
	8297506	Met Requirements
	8297508	Met Requirements
Desk Table Unit Drop Test	8290441	Met Requirements
	8297506	Met Requirements
	8297508	Met Requirements
Leg Strength Test	8290441	Met Requirements
	8297506	Met Requirements
	8297508	Met Requirements

Load Calculations:

<u>Specimen</u>	<u>Component</u>	<u>Calculation</u>	<u>Load (lbs.)</u>
8290441		Functional Load	
	Unit Top	(144) x 1.5	216
		Proof Load	
	Unit Top	(144) x 2.3	332
8297506		Functional Load	
	Unit Top	(252) x 1.5	378
		Proof Load	
	Unit Top	(252) x 2.3	580
8297508		Functional Load	
	Unit Top	(228) x 1.5	342
		Proof Load	
	Unit Top	(228) x 2.3	524

Test Results:

Stability under Vertical Load Test:

Testing was performed per ANSI/BIFMA X5.5-2021, Section 4.3.

Notes:

- 125 lb. loads were applied through 12" discs, 75 lb. load was applied through an 8" disc.
- See photos for setups.



Stability under Vertical Load Test (continued):



<u>Specimen</u>	<u>Load (lbs.)</u>	<u>Load Location</u>	<u>Observations</u>
8290441	125	Front edge 1" in.	Unit did not tip over.
	75	Front edge flush	Unit did not tip over.
8297505	125	Front edge 1" in.	Unit did not tip over.
	75	Front edge flush	Unit did not tip over.
8297506	125 (x2)	Front edge 1" in.	Unit did not tip over.
	75	Front edge flush	Unit did not tip over.
8297507	125	Front edge 1" in.	Unit did not tip over.
	75	Front edge flush	Unit did not tip over.
8297508	125 (x2)	Front edge 1" in.	Unit did not tip over.
	75	Front edge flush	Unit did not tip over.

Requirement: The unit shall not tip over from either the 57 kg (125 lb.) load(s) or from the 34 kg (75 lb.) load.

Concentrated Functional Load Test:

Testing was performed per ANSI/BIFMA X5.5-2021, Section 5.2.

Notes:

- See photos for setups.



<u>Specimen</u>	<u>Load (lbs.)</u>	<u>Time (min.)</u>	<u>Observations</u>
8290441	200	60	No loss of serviceability.
8297506	200 (x2)	60	No loss of serviceability.
8297508	200 (x2)	60	No loss of serviceability.

Requirement: *There shall be no loss of serviceability. Upon completion of the test, the extendible element(s) shall meet the pull force requirements of Section 19 as tested in 5.2.2.*

Distributed Functional Load Test:

Testing was performed per ANSI/BIFMA X5.5-2021, Section 5.3.

Notes:

- The unit tops were loaded with the functional loads as calculated on page 3.
- See photos for setups.



<u>Specimen</u>	<u>Total Load</u>	<u>Time</u>	<u>Observations</u>
8290441	216	60 min	No loss of serviceability.
8297506	378	60 min	No loss of serviceability.
8297508	342	60 min	No loss of serviceability.

Requirement: *There shall be no loss of serviceability. Upon completion of the test, the extendible element(s) shall meet the pull force requirements of Section 19 as tested in 5.3.2.*

Concentrated Proof Load Test:

Testing was performed per ANSI/BIFMA X5.5-2021, Section 5.4.

Notes:

- See photos for setups.



<u>Specimen</u>	<u>Load (lbs.)</u>	<u>Time (min.)</u>	<u>Observations</u>
8290441	300	15	No sudden and major change in structural integrity.
8297506	300 (x2)	15	No sudden and major change in structural integrity.
8297508	300 (x2)	15	No sudden and major change in structural integrity.

Requirement: *There shall be no sudden and major change in structural integrity of the product. Loss of serviceability is acceptable. Height adjustable tables do not need to maintain their setup position during the proof load test, but the unit must hold the load at some position for the 15 minutes. A slow back-driving (lowering) of the height adjustable surface is acceptable.*

Distributed Proof Load Test:

Testing was performed per ANSI/BIFMA X5.5-2021, Section 5.5.

Notes:

- The unit tops were loaded with the proof loads as calculated on page 3.
- See photos for setups.



<u>Specimen</u>	<u>Total Load (lbs.)</u>	<u>Time (min.)</u>	<u>Observations</u>
8290441	332	15	No sudden and major change.
8297506	580	15	No sudden and major change.
8297508	524	15	No sudden and major change.

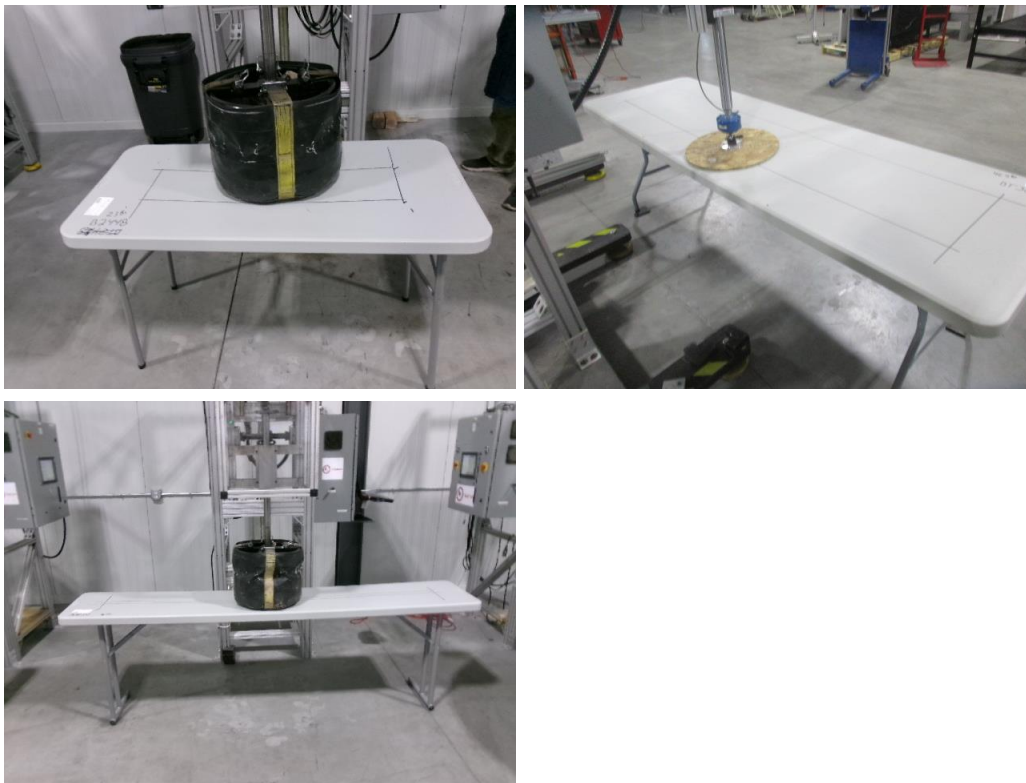
Requirement: *There shall be no sudden and major change in structural integrity of the product. Loss of serviceability is acceptable. Height adjustable tables do not need to maintain their setup position during the proof load test, but the unit must hold the load at some position. A slow back-driving (lowering) of the height adjustable surface is acceptable.*

Top Load Ease Cycle Test:

Testing was performed per ANSI/BIFMA X5.5-2021, Section 6.

Notes:

- Test Rate: 13 – 19 CPM.
- See photos for setups.



<u>Specimen</u>	<u>Cycles</u>	<u>Observations</u>
8290441	10,000	No loss of serviceability.
8297506	10,000	No loss of serviceability.
8297508	10,000	No loss of serviceability.

Requirement: *There shall be no loss of serviceability to the unit. Before and after the cycling test, the extendible elements shall meet the pull force requirements of Section 19. A gradual loss of height for height adjustable products during cycling is not considered a loss of serviceability.*

Desk/Table Unit Drop Test:

Testing was performed per ANSI/BIFMA X5.5-2021, Section 7.

Notes:

- Drop height was determined by weight of the unit.
- See photos for setups.



<u>Specimen</u>	<u>Unit weight</u>	<u>Drop Height</u>	<u>End Raised</u>	<u>Observations</u>
8290441	23 lbs.	7.1"	Left	No loss of serviceability.
			Right	No loss of serviceability.
8297506	46.5 lbs.	7.1"	Left	No loss of serviceability.
			Right	No loss of serviceability.
8297508	41 lbs.	7.1"	Left	No loss of serviceability.
			Right	No loss of serviceability.

Requirement: *There shall be no loss of serviceability. The extendible elements shall meet the pull force test requirements in Section 19.*

Leg Strength Test:

Testing was performed per ANSI/BIFMA X5.5-2021, Section 8.

Notes:

- Test not applied in direction of leg folding mechanism.
- See below for load calculations.

Sample	Weight (lbs.)	Direction	Calculation	Load (lbs.)
8290441	23	Functional A1	$(0.5 \times 23) + 50$	62
		Functional B1/B2	0.5×62	31
		Proof A1	1.5×62	92
		Proof B1/B2	1.5×31	46
8297506	46.5	Functional A1	$(0.5 \times 46.5) + 50$	73
		Functional B1/B2	0.5×73	37
		Proof A1	1.5×73	110
		Proof B1/B2	1.5×37	55
8297508	41	Functional A1	$(0.5 \times 41) + 50$	71
		Functional B1/B2	0.5×71	35
		Proof A1	1.5×71	106
		Proof B1/B2	1.5×35	53

- See photos for setups.



Leg Strength Test (continued):



<u>Sample</u>	<u>Directions</u>	<u>Load (lbs.)</u>	<u>Observations</u>
8290441	A1	62	No loss of serviceability.
	B1 – B2	31	No loss of serviceability.
	A1	92	No sudden and major change in structural integrity.
	B1 – B2	46	No sudden and major change in structural integrity.
8297506	A1	73	No loss of serviceability.
	B1 – B2	37	No loss of serviceability.
	A1	110	No sudden and major change in structural integrity.
	B1 – B2	55	No sudden and major change in structural integrity.
8297508	A1	71	No loss of serviceability.
	B1 – B2	35	No loss of serviceability.
	A1	106	No sudden and major change in structural integrity.
	B1 – B2	53	No sudden and major change in structural integrity.

Requirement:

Functional Load: *No loss of serviceability shall occur as a result of the application of the functional loads, extendible element(s) shall meet the pull force requirements of Section 19. For Tilt-top tables, release of the top latching mechanism during the test is considered a loss of serviceability.*

Proof Load: *Application of the proof loads shall cause no sudden and major change in the structural integrity of the product. Loss of serviceability is acceptable.*