



CONSUMER PRODUCTS SERVICES DIVISION

NATIONAL PUBLIC SEATING CORP

Technical Report: (5122)186-0014

Date Received: July 5, 2022

July 27, 2022

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AVI GOLDBERG
NATIONAL PUBLIC SEATING CORP
149 ENTIN ROAD
CLIFTON NJ 07014
UNITED STATES

Sample Description:	HEAVY DUTY STOOL WITH BACK REST		
Manufacturer:	NATIONAL PUBLIC SEATING	PO No.:	TITAN-30-0622
Buyer:	N/A	Style:	TITAN-30
Country of Origin:	TAIWAN	Country of Destination:	UNITED STATES
Color:	GREY	SKU No.:	TITAN-30
Protocol No.:	N/A	UPC Code:	N/A
Previous Report No.:	N/A	Lot No:	N/A

EXECUTIVE SUMMARY:

The submitted sample(s) were evaluated to the requested applicable sections of protocol **CPSD-03055.05-US**.

The sample(s) received a **PASS** rating.

BVCPS Buffalo Contact Information for this Report:

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Bureau Veritas
Consumer Products Services, Inc.

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/AN



**Excerpt from BUREAU VERITAS TEST PROTOCOL FOR
 CPSD-03055.05-US**

HOSPITALITY CHAIR/ STOOL (V24)

Evaluation	Citation/Method	No. Samples	Criteria	Results	Rating
Type I: Tilting chair, Type II: Fixed seat angle, tilting back rest, Type III: Fixed seat angle, fixed backrest					
Backrest strength test - static - type I and II - functional load	ANSI/BIFMA X5.1-17 Sec. 5	1	There shall be no loss of serviceability to the chair when a force of 667 N (150 lbf.) is applied to the backrest at the backstop position for one (1) minute.	NA Per Product Type	-
Backrest strength test - static - type I and II - proof load	ANSI/BIFMA X5.1-17 Sec. 5	1	There shall be no sudden and major change in the structural integrity of the chair (Loss of serviceability is acceptable) when a force of 1001 N (225 lbf.) is applied to the backrest at the backstop position for one (1) minute.	NA Per Product Type	-
Backrest strength test - static - type III - functional load	ANSI/BIFMA X5.1-17 Sec. 6	1	A functional load applied once shall cause no loss of serviceability to the chair when a force of 667 N (150 lbf.) is applied to the backrest at the backstop position for one (1) minute.	M	PASS
Backrest strength test - static - type III - proof load	ANSI/BIFMA X5.1-17 Sec. 6	1	A proof load applied once shall cause no sudden and major change in the structural integrity of the chair (Loss of serviceability is acceptable) when a force of 1001 N (225 lbf.) is applied to the backrest at the backstop position for one (1) minute.	M	PASS
Drop test - dynamic - functional load	ANSI/BIFMA X5.1-17 Sec. 7	1	There shall be no loss of serviceability when a test bag weighing 102 kg (225 lb.) is raised 152 mm (6 in.) above the uncompressed seat and released one time.	M	PASS
Drop test - dynamic - proof load	ANSI/BIFMA X5.1-17 Sec. 7	1	There shall be no sudden and major change in the structural integrity of the chair (Loss of serviceability is acceptable) when a proof load of 136 kg (300 lb.) is raised 152 mm (6 in.) above the uncompressed seat and released one time.	M	PASS
*Swivel test - cyclic	ANSI/BIFMA X5.1-17 Sec. 8	1	There shall be no loss of serviceability when the seat or platform is rotate for total of 120,000 at a rate between 5 and 15 rotations per minute with a 122 kg (270 lb.) load placed on the seat.	NA Per Product Type	-



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Evaluation	Citation/Method	No. Samples	Criteria	Results	Rating
*Tilt mechanism test - cyclic	ANSI/BIFMA X5.1-17 Sec. 9	1	[Type I & II chairs] No structural breakage or loss of serviceability in 300,000 cycles at a rate between 10 and 30 cycles per minute under a 109 kg (240 lb) load to the center of the seat.	NA Per Product Type	-
*Seating durability test - cyclic	ANSI/BIFMA X5.1-17 Sec. 10	1	There shall be no loss of serviceability to the chair after completion of both the impact 57 kg (125 lb.) free fall to seat 36mm (1.4in.) for 100,000 cycles) and load-ease 890N (200 lbf) lowering to front corners of seat for 40,000 cycles tests.	M	PASS
*Stability tests - rear stability for type III chairs	ANSI/BIFMA X5.1-17 Sec. 11	1	The chair shall not tip over when loaded with 6 disks (disk weighing 10kg (22 lb) each having diameter of 350mm (13.8 in.)) and horizontal force is applied. For seat height < 710 mm (28.0 in.); • F = 0.1964 (1195 – H) Newton. H is the seat height in mm. • F = 1.1 (47 – H) pounds force. H is the seat height in inches. For chairs with seat height equal to or greater than 710 mm (28.0 in.), a fixed force of 93 N (20.9 lbf.) shall be applied.	M	PASS
*Stability tests - rear stability for type I and II chairs	ANSI/BIFMA X5.1-17 Sec. 11	1	The chair shall not tip over when loaded with 13 disks (disk weighing 10kg (22 lb) each having diameter of 350mm (13.8 in.))	NA Per Product Type	-
*Stability tests - front stability	ANSI/BIFMA X5.1-17 Sec. 11	1	The chair shall not tip over when a vertical load of 600 N (135 lbf.) is applied by means of the front stability loading fixture with horizontal force of 20 N (4.5 lbf.) applied at the same level of the plane of the top of the seat.	M	PASS
*Arm strength test - vertical - static - functional load	ANSI/BIFMA X5.1-17 Sec. 12	1	There shall be no loss of serviceability when a force of 750 N (169 lbf.) is applied for one (1) minute.	NA Per Product Type	-
*Arm strength test - vertical - static - proof load	ANSI/BIFMA X5.1-17 Sec. 12	1	There shall be no sudden and major change in the structural integrity of the chair when a force of 1125 N (253 lbf.) is applied for 15 seconds	NA Per Product Type	-
*Arm strength test - horizontal - static - functional load	ANSI/BIFMA X5.1-17 Sec. 13	1	It shall cause no loss of serviceability when a force of 445 N (100 lbf.) is applied for one (1) minute in the outward direction.	NA Per Product Type	-



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Evaluation	Citation/Method	No. Samples	Criteria	Results	Rating
*Arm strength test - horizontal - static - proof load	ANSI/BIFMA X5.1-17 Sec. 13	1	It shall cause no sudden and major change in the structural integrity of the unit (Loss of serviceability is acceptable) when a force of 667 N (150 lbf.) is applied for 15 seconds in the outward direction.	NA Per Product Type	-
*Backrest durability test - cyclic - type I	ANSI/BIFMA X5.1-17 Sec. 14	1	There shall be no loss of serviceability when a weight of 109 kg (240 lb.) is secured in the center of the seat and applying a 445 N (100 lbf.) total force to the backrest at a rate between 10 and 30 cycles per minute for 120,000 cycles for backrest widths less than or equal to 406 mm (16 in.) at the height of the loading point. For chairs with backrest widths greater than 406 mm (16 in.) at the height of the loading point, apply the load to the backrest for 80,000 cycles, additional 20,000 cycles to right side of backrest and last 20,000 cycles to the left side of backrest.	NA Per Product Type	-
*Backrest durability test - cyclic - type II and type III	ANSI/BIFMA X5.1-17 Sec. 15	1	There shall be no loss of serviceability when a weight of 109 kg (240 lb.) is secured in the center of the seat and applying a 334 N (75 lbf.) total force to the backrest at a rate between 10 and 30 cycles per minute for 120,000 cycles for backrest widths less than or equal to 406 mm (16 in.) at the height of the loading point. For chairs with backrest widths greater than 406 mm (16 in.) at the height of the loading point, apply the load to the backrest for 80,000 cycles, additional 20,000 cycles to right side of backrest and last 20,000 cycles to the left side of backrest.	M	PASS
*Caster or chair base durability test - cyclic - pedestal base chairs	ANSI/BIFMA X5.1-17 Sec. 16.1	1	[Durability cycling] There shall be no loss of serviceability when a 122 kg (270 lb.) load is on the seat of the chair and cycled 2,000 cycles over the obstacles then 98,000 cycles on a smooth, hard surface without obstacles.	NA Per Product Type	-
*Caster or chair base durability test - cyclic - pedestal base chairs	ANSI/BIFMA X5.1-17 Sec. 16.1	1	[Caster retention] No part of the caster shall separate from the chair as a result of the application of the 22 N (5 lbf.) force after the durability cycling test.	NA Per Product Type	-



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Evaluation	Citation/Method	No. Samples	Criteria	Results	Rating
*Caster or chair base durability test - cyclic - chairs with legs	ANSI/BIFMA X5.1-17 Sec. 16.2	1	[Durability cycling] There shall be no loss of serviceability when a 122 kg (270 lb.) load is on the seat of the chair and cycled 2,000 cycles over the obstacles then 98,000 cycles on a smooth, hard surface without obstacles.	NA Per Product Type	-
*Caster or chair base durability test - cyclic - chairs with legs	ANSI/BIFMA X5.1-17 Sec. 16.2	1	[Caster retention] No part of the caster shall separate from the chair as a result of the application of the 22 N (5 lbf.) force after the durability cycling test.	NA Per Product Type	-
*Leg strength test - front application - functional load	ANSI/BIFMA X5.1-17 Sec. 17.3	1	It shall cause no loss of serviceability when a force of 334 N (75 lbf.) is applied once to each front leg individually for one (1) minute.	M	PASS
*Leg strength test - front application - proof load	ANSI/BIFMA X5.1-17 Sec. 17.3	1	It shall cause no sudden and major change in the structural integrity of the chair (loss of serviceability is acceptable) when a force of 503 N (113 lbf.) is applied once to each front leg individually for one (1) minute.	M	PASS
*Leg strength Test - side application - functional load	ANSI/BIFMA X5.1-17 Sec. 17.4	1	It shall cause no loss of serviceability when a force of 334 N (75 lbf.) is applied to a front and rear leg individually for one (1) minute.	M	PASS
*Leg strength Test - side application - proof load	ANSI/BIFMA X5.1-17 Sec. 17.4	1	It shall cause no sudden and major change in the structural integrity of the chair (loss of serviceability is acceptable) when a force of 503 N (113 lbf.) is applied once to a front and rear leg individually for one (1) minute.	M	PASS
*Footrest durability test - vertical - cyclic	ANSI/BIFMA X5.1-17 Sec. 19	1	There shall be no loss of serviceability when a 890 N (200 lbf.) force is applied uniformly along the footrest for 50,000 cycles at a rate between 10 and 30 cycles per minute.	M	PASS



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Evaluation	Citation/Method	No. Samples	Criteria	Results	Rating
*Arm durability test - cyclic	ANSI/BIFMA X5.1-17 Sec. 20	1	There shall be no loss of serviceability to the chair when simultaneously applying a force of 400 N (90 lbf.) to each arm initially at a $10^{\circ} \pm 1^{\circ}$ angle for 60,000 cycles at a rate between 10 and 30 cycles per minute.	NA Per Product Type	-
*Structural durability test - cyclic	ANSI/BIFMA X5.1-17 Sec. 24	1	[Non swivel chair] There shall be no loss of serviceability when a weight of 109 kg (240 lb) placed in the center of the seat and apply a "push-pull action" with force of 334 N (75lbf) to the sides of the unit at rate of 10-30 cycles per minute for 25,000 cycles	M	PASS



Key:

* Additional Charge For This Test
 ** Mandatory Requirement
 # By Request Only

Result Key:

C Claimed
 R Recorded
 M Meets
 NM Does Not Meet
 NA Not Applicable
 NT Not Tested

Rating Key:

PASS Pass
 FAIL Fail
 NR Not Requested

No. Of Samples Required For Complete Testing:	5
No. Of (Fully Packed) Cartons For Transit Testing:	1
No. Of Working Days For Complete Testing:	20

4 chairs, 1 caster base
 1 chair, 2 sq. yard of each fabric / leather and,
 20 pieces – 12" x 3" x 0.5" foam
 6 pieces – 8" x 7.25" x 2" foam
 6 pieces – 8" x 4" x 2" foam
 to HK Lab.

Client Approval:

Creation Date: MARCH 1, 2011
 Editorial Revision Date: MAY 28, 2021
 Pricing Review Date:
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EXHIBIT # 1



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TEST SAMPLE AS RECEIVED