



# Test Report: 4791224224.1

## APPLICANT

**Name:** Pineapple Contracts Unlimited  
**Address:** Westmead  
 Aylesford, ME20 6XJ  
 United Kingdom

**Product:** ANSI/BIFMA X5.4-2020 - Skye chair



## DATE

<b>Sample in:</b>	22/4/2024	(dd/mm/yyyy)
<b>Tests start:</b>	22/4/2024	(dd/mm/yyyy)
<b>Tests end:</b>	23/5/2024	(dd/mm/yyyy)
<b>Report issue:</b>	24/5/2024	(dd/mm/yyyy)

## OVERALL DIMENSIONS:

<b>Measured:</b>	<b>Depth:</b>	785 mm;	<b>Height:</b>	805 mm;
	<b>Width:</b>	730 mm;	<b>Weight:</b>	22,3 kg;
<b>Nominal</b>	<b>Depth:</b>	ND;	<b>Height:</b>	ND;
	<b>Width:</b>	ND;	<b>Weight:</b>	ND;
<b>Sample number</b>	7047991	<b>Order number:</b> 15205364		

## REFERENCE STANDARD

### ANSI/BIFMA X5.4:2020 Public and Lounge Seating.

NOTE: clauses considered as not applicable to the product are not listed in this report.

Example of products covered by the standard: common/shared spaces such as waiting, reception, visitor seating in patient rooms\*, restaurant/dining/cafeteria\*\* settings and other gathering areas.

### Sample defects before the test: NO VISIBLE DEFECTS

Tests have been performed at a temperature of 21 ± 6 °C

The tests have been performed on 1 sample as requested by the customer

The sample is classified as single seat of class A (with arm(s) and with backrest)

**Technician**  
 Rodolfo Sala

**Laboratory Manager**  
 Matteo Longoni

*Note: any copy, even partial, of this report, and any change or alteration to it are strictly forbidden.  
 The test results listed in this report are relevant only for the tested sample. Sampling performed by the customer.*



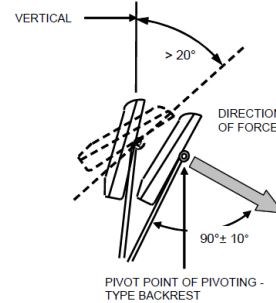
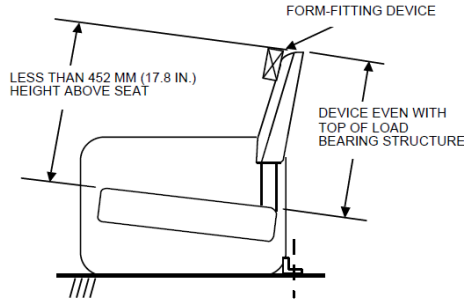
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<b>Seating properties</b>		
<b>Length of the seat [mm]</b>	<b>Number of seating positions (nearest whole number to length divided by 771)</b>	<b>Single seat length (mm)</b>
530	1	530

**Note:**

**ANSI/BIFMA X5.4:2020 Par. 5 Backrest Strength Test - Horizontal - Static**



Test has been performed pushing the backrest backwards

Backrest height: 400 mm

Backrest inclination: 72.7°

Loading pad height measured from the seat: Top of the backrest

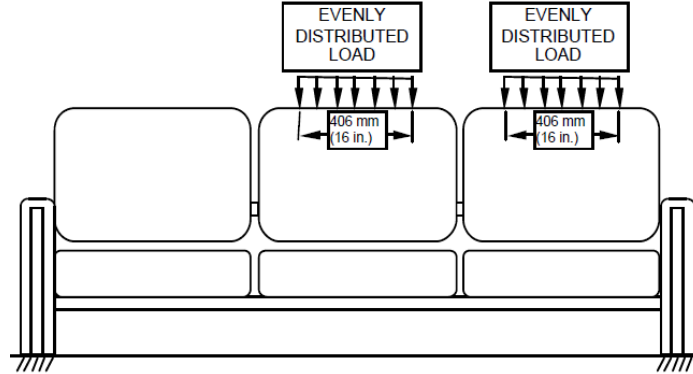
Functional Load			
Backrest load (N)	Time of application (sec)	Cycles	Rating
667	60	1	P

Note: Test performed on sample as 5<sup>th</sup> test on this sample.

Proof Load			
Backrest load (N)	Time of application (sec)	Cycles	Rating
1.112	10	1	P

Note: Test performed on sample as 6<sup>th</sup> test on this sample.

ANSI/BIFMA X5.4:2020 Par. 6 Backrest Strength Test - Vertical - Static



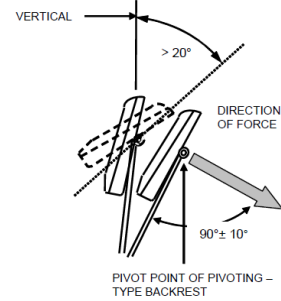
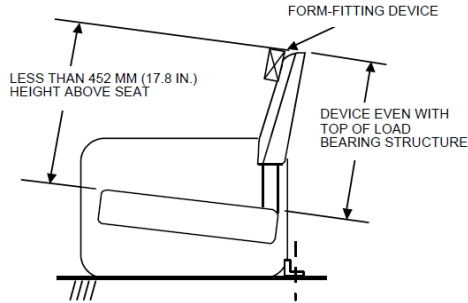
Functional Load			
Backrest load (N)	Time of application (sec)	Cycles	Rating
890	60	1	P

**Note:** Test performed on sample as 7<sup>th</sup> test on this sample.

Proof Load			
Backrest load (N)	Time of application (sec)	Cycles	Rating
1.334	10	1	P

**Note:** Test performed on sample as 8<sup>th</sup> test on this sample.

**ANSI/BIFMA X5.4:2020 Par. 7 Backrest Durability Test - Horizontal - Cyclic**



**Test has been performed pushing the backrest backwards**

**Backrest height:** 400 mm

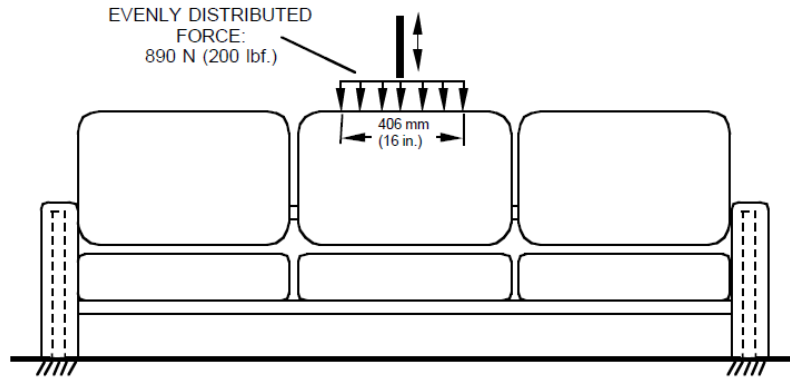
**Backrest inclination:** 72.7°

**Loading pad height measured from the seat:** Top of the backrest

Seat load (kg)	Backrest load(N)	Frequency (cycles per minute)	Cycles	Rating
109	334	10	120.000	P

**Note:** Test performed on sample as 4<sup>th</sup> test on this sample.

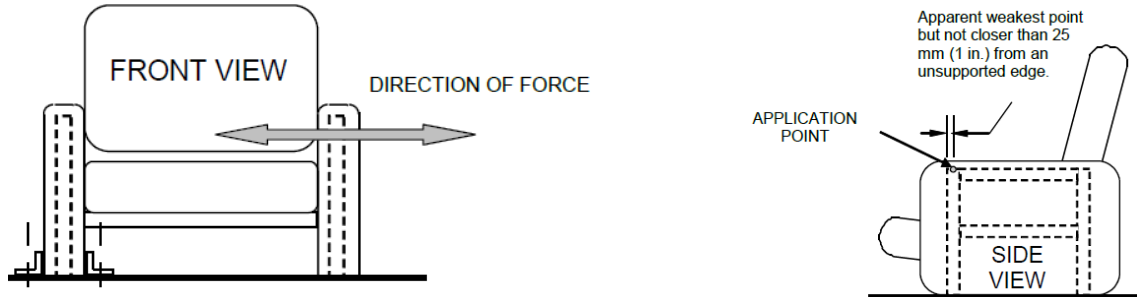
ANSI/BIFMA X5.4:2020 Par. 8 Backrest Durability Test - Vertical - Cyclic



Backrest load (N)	Frequency (cycles per minute)	Cycles	Rating
890	10	10.000	P

**Note:** Test performed on sample as 3<sup>rd</sup> test on this sample.

ANSI/BIFMA X5.4:2020 Par. 9 Arm Strength Test - Horizontal – Static



Distance from the backrest to loading point on the arm: 700 mm  
 Functional and proof load tests have been performed on the same sample.

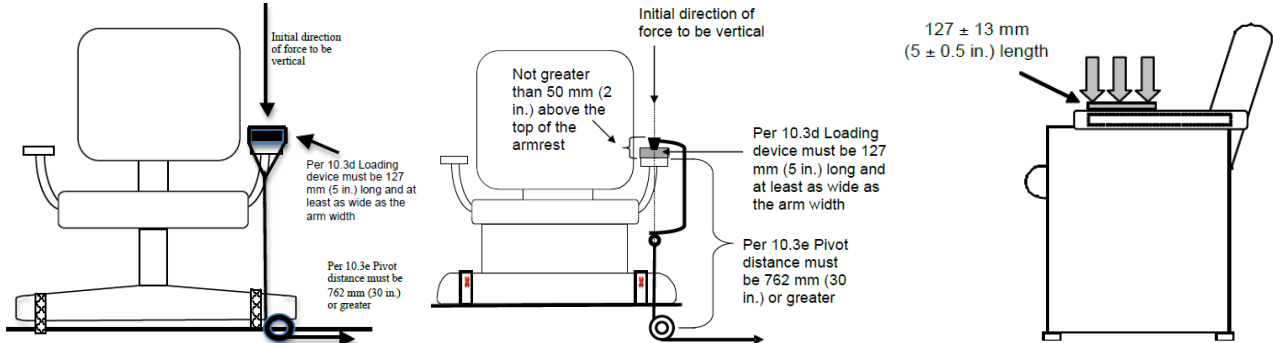
Functional Load					
Distance between armrests (mm)	Applied force (N)	Direction	Time of application (sec)	Cycles	Rating
< 889	445	Inward	60	1	P
	445	Outward	60	1	P
> 889	592	Inward	60	1	NA
	592	Outward	60	1	NA

**Note:** Test performed on sample as 9<sup>th</sup> test on this sample.  
 Distance between armrests: 570 mm.

Proof Load					
Distance between armrests (mm)	Applied force (N)	Direction	Time of application (sec)	Cycles	Rating
< 889	667	Inward	10	1	P
	667	Outward	10	1	P
> 889	890	Inward	10	1	NA
	890	Outward	10	1	NA

**Note:** Test performed on sample as 10<sup>th</sup> test on this sample.  
 The forces inward and outward have been performed on the same armrest.  
 Distance between armrests: 570 mm.

**ANSI/BIFMA X5.4:2020 Par. 10 Arm Strength Test - Vertical - Static**



Distance from the backrest to the loading point: 700 mm

Functional and proof load tests have been performed on the same sample.

Functional Load				
Armrest width (mm)	Applied force (N)	Time of application (sec)	Cycles	Rating
≤ 75	750	60	1	P
> 75	890	60	1	NA

**Note:** Test performed on sample as 11<sup>th</sup> test on this sample.  
Armrest width: 60 mm.

Proof Load				
Armrest width (mm)	Applied force (N)	Time of application (sec)	Cycles	Rating
≤ 75	1.125	10	1	P
> 75	1.335	10	1	NA

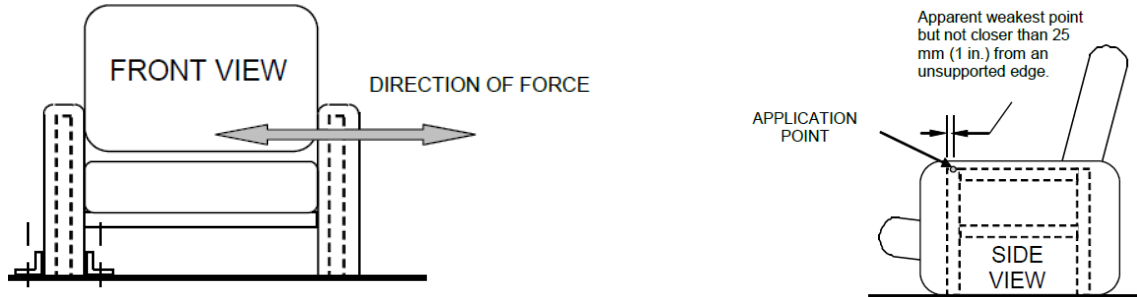
**Note:** Test performed on sample as 12<sup>th</sup> test on this sample.  
Armrest width: 60 mm.



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**ANSI/BIFMA X5.4:2020 Par. 11 Arm Durability Test for Multiple Seat Units - Horizontal - Cyclic**



Applied force (N)	Frequency (cycles per minute)	Cycles	Rating
445	10 to 30	50.000	NA

**Note:** not a multiple seating unit.

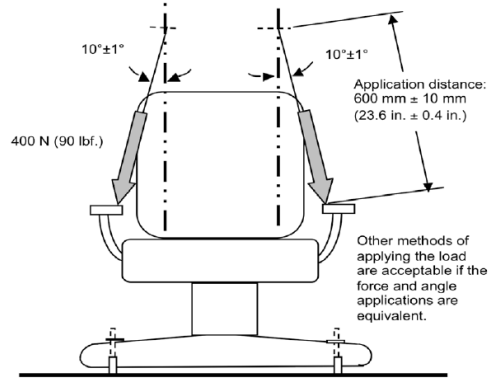
**ANSI/BIFMA X5.4:2020 Par. 12 Arm Durability Test for Multiple Seating Units - Vertical - Cyclic**



Applied force (N)	Frequency (cycles per minute)	Cycles	Rating
667	10 to 30	10.000	NA

**Note:** not a multiple seating unit.

**ANSI/BIFMA X5.4:2020 Par. 13 Arm Durability Test for Single Seat Units - Angular – Cyclic**

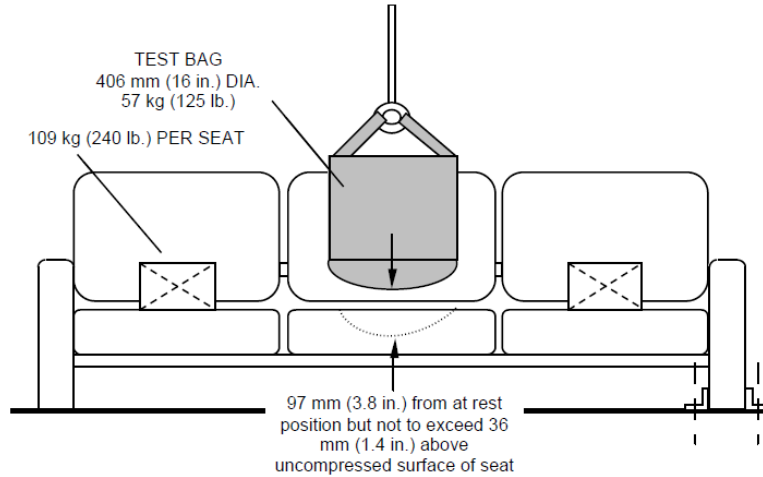


Distance between the inner edge of the armrest and the loading point: 25 mm  
 Angle inclination of force: 10 °

Load (N)	Cycles	Frequency (cycles per minute)	Rating
400	60.000	10	P

**Note:** Test performed on sample as 1<sup>st</sup> test on this sample.

ANSI/BIFMA X5.4:2020 Par. 14 Seating Durability Tests - Cyclic



Minimum thickness of cushiony materials of seat: >50 mm

Thickness of additional foam: 0 mm

Distance between the bag and the backrest: 13 mm

Vertical distance between the bottom of the bag in its “at rest” position and the uncompressed surface on the seat: 36 mm

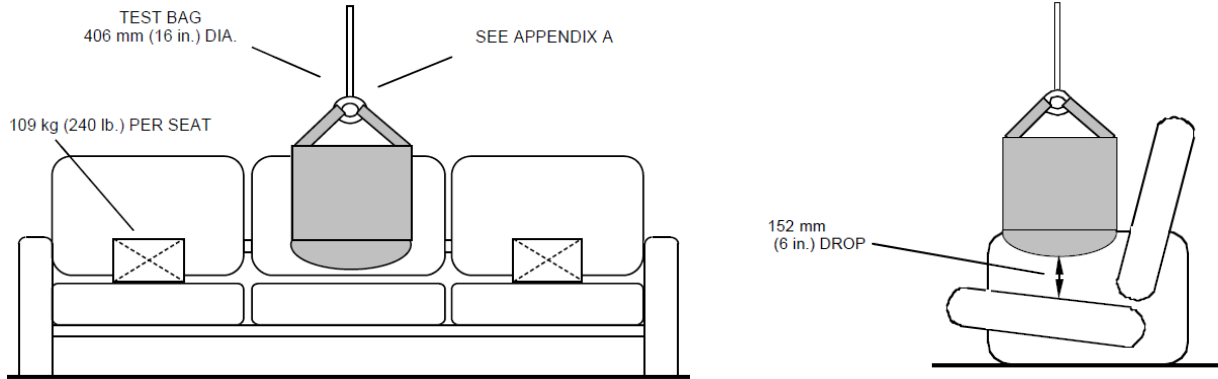
Weight of bag (kg)	Height of fall from “at rest” position (mm)	Cycles	Frequency (cycles / minute)	Rating
57	36	100.000	10	P

Note: Test performed on sample as 2<sup>nd</sup> test on this sample.

Weight of bag (kg)	Height of fall from “at rest” position (mm)	Cycles	Frequency (cycles / minute)	Rating
57	36	100.000	10	NA

Note: not a multiple seating unit.

ANSI/BIFMA X5.4:2020 Par. 15 Drop Test - Dynamic



Functional load

Applied load to sitting places not under tested (kg)	Number of sitting places tested	Drop height above uncompressed seat (mm)	Impact mass (kg)	Cycles	Rating
102	-	152	102	1	P

**Note:** Test performed on sample as 13<sup>th</sup> test on this sample. The test has been performed on each sitting position in sequence.

Proof load

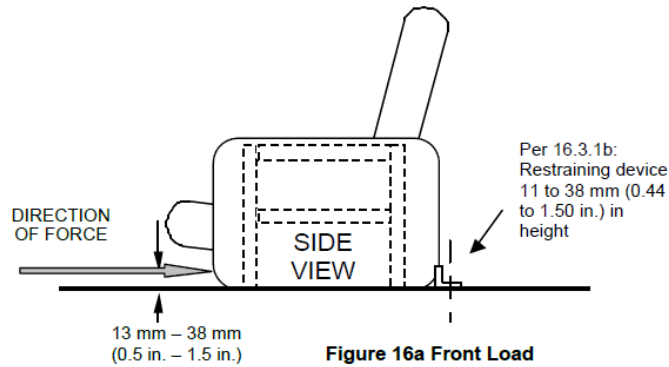
Applied load to sitting places not under tested (kg)	Number of sitting places tested	Drop height above uncompressed seat (mm)	Impact mass (kg)	Cycles	Rating
136	-	152	136	1	P

**Note:** Test performed on sample as 14<sup>th</sup> test on this sample. The test has been performed on each sitting position in sequence.

ANSI/BIFMA X5.4:2020 Par. 16 Leg Strength Test - Front and Side

This test shall be performed on all units without pedestal bases (e.g. with legs or feet)

ANSI/BIFMA X5.4:2020 Par. 16.3 Front Load Test



Load is applied to inwards and parallel to the axis from the front and back of the seat.

Load is applied one time on each front leg.

Height load pad (measured from floor): 13 mm

Distance between the load pad from the outer edge of the leg: < 25mm

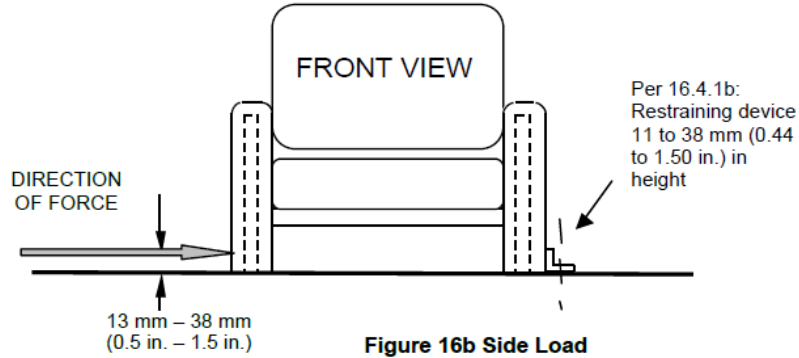
Functional load			
Horizontal force (N)	Time of application (sec)	Cycles	Rating
334	60	1	P

Note: Test performed on sample as 15<sup>th</sup> test on this sample.

Proof load			
Horizontal force (N)	Time of application (sec)	Cycles	Rating
667	60	1	P

Note: Test performed on sample as 16<sup>th</sup> test on this sample.

ANSI/BIFMA X5.4:2020 Par. 16.4 Side Load Test



Load is applied to inwards and parallel to the axis from the front and back of the seat.  
 Load is applied one time on each front leg.  
 Height load pad (measured from floor): 13 mm  
 Distance between the load pad from the outer edge of the leg: < 25mm

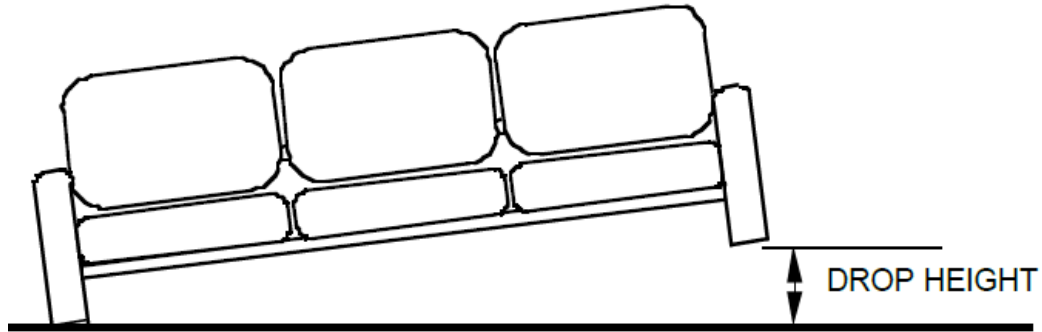
Functional load			
Horizontal force (N)	Time of application (sec)	Cycles	Rating
334	60	1	P

**Note:** Test performed on sample as 17<sup>th</sup> test on this sample.

Proof load			
Horizontal force (N)	Time of application (sec)	Cycles	Rating
667 N	60	1	P

**Note:** Test performed on sample as 18<sup>th</sup> test on this sample.

ANSI/BIFMA X5.4:2020 Par. 17 Unit Drop Test - Dynamic

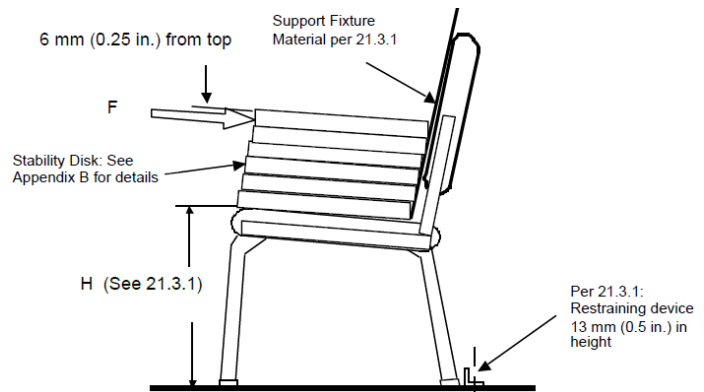
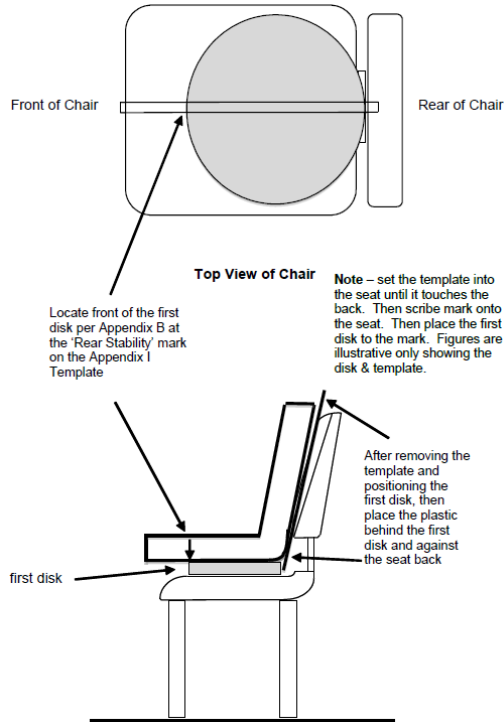


Sample weight (kg)	Drop height (mm)	Cycles	Side	Rating
< 45	180	1	Left	P
		1	Right	P
45 - 90	120	1	Left	NA
		1	Right	NA
> 90 – 136	60	1	Left	NA
		1	Right	NA
> 136	Non applicabile	-	-	NA

**Note:** Test performed on both sides of the sample. Test performed on sample as 19<sup>th</sup> test on this sample.

ANSI/BIFMA X5.4:2020 Par. 21 Stability Tests

ANSI/BIFMA X5.4:2020 Par. 21.3 Rear Stability for Non-tilting Units



Force has been applied : On top of disks

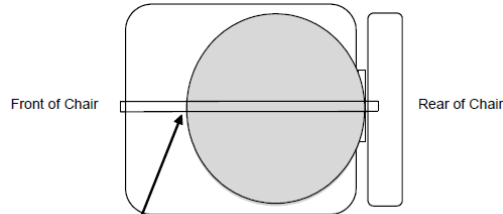
Applied discs on seat	Horizontal force (N)	Loading point	Rating
6	163	On top of disks	P

**Note:** The horizontal force was determined by the following formula:  $F = 0,1964 (1195 - H)$ , when H found is: 430 mm.

Test performed on sample as 20<sup>th</sup> test on this sample.



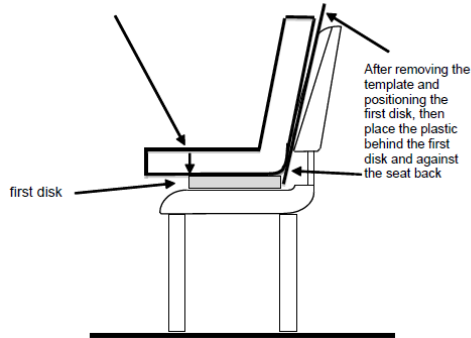
**ANSI/BIFMA X5.4:2020 Par. 21.4 Rear Stability for Tilting Units**



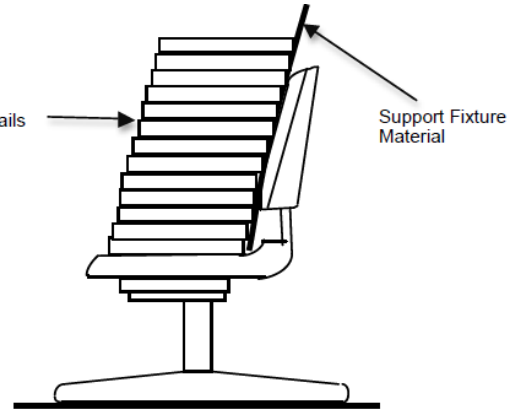
**Top View of Chair**

Locate front of the first disk per Appendix B at the 'Rear Stability' mark on the Appendix I Template

Note – set the template into the seat until it touches the back. Then scribe mark onto the seat. Then place the first disk to the mark. Figures are illustrative only showing the disk & template.



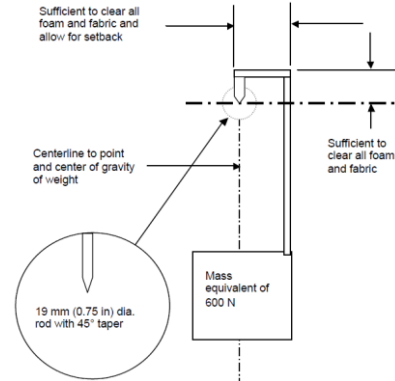
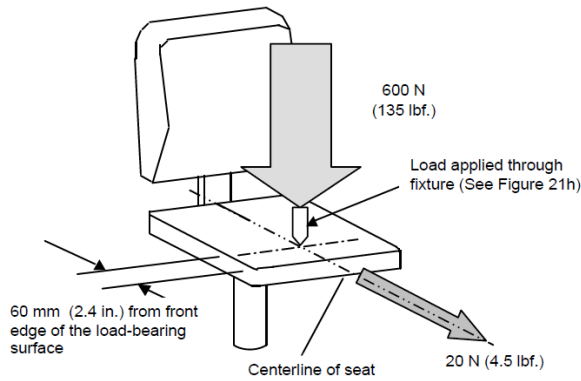
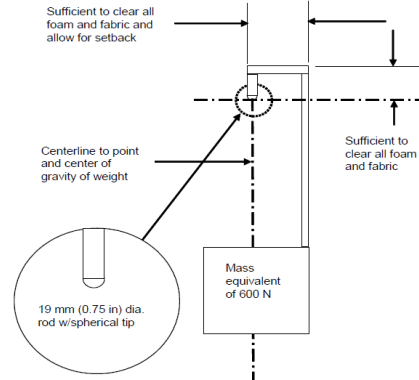
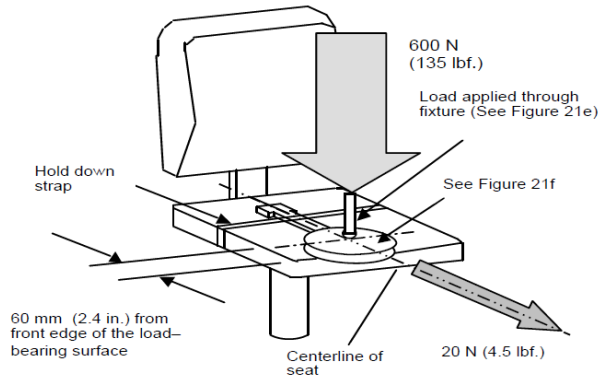
Stability Disk: See Appendix B for Details



Applied discs on seat	Rating
13	NA

**Note:** Non tilting units.

**ANSI/BIFMA X5.4:2020 Par. 21.5 Front Stability for Units Less than 36.3 kg (80 lbs.)**



Load seat (kg)	Loading point (mm)	Horizontal force (N)	Rating
60	60 from the front center edge of the loadbearing surface of the chair	20	P

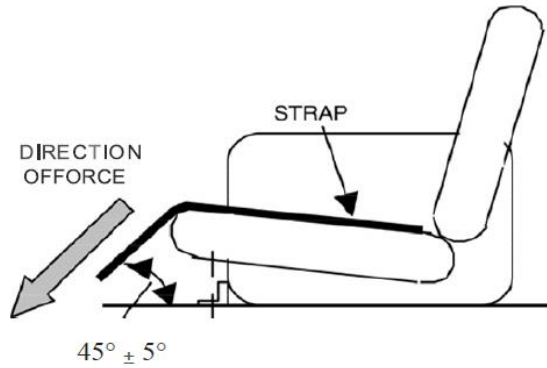
**Note:** Test performed on sample as 21<sup>th</sup> test on this sample.

Weight: 22,3 kg / 49.16 lbs;

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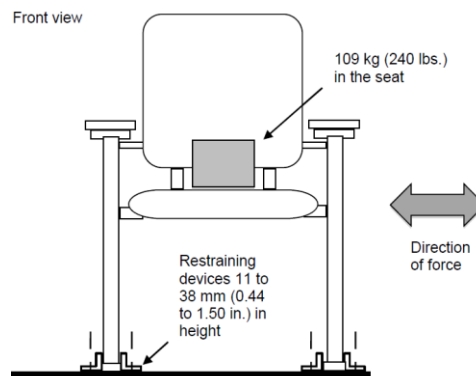
**ANSI/BIFMA X5.4:2020 Par. 21.6 Front Stability for Units Greater Than or Equal to 36.3 kg (80 lbs.)**



Applied force - Downward (N)	Rating
-	NA

Note: Weight: 22,3 kg / 49.16 lbs;

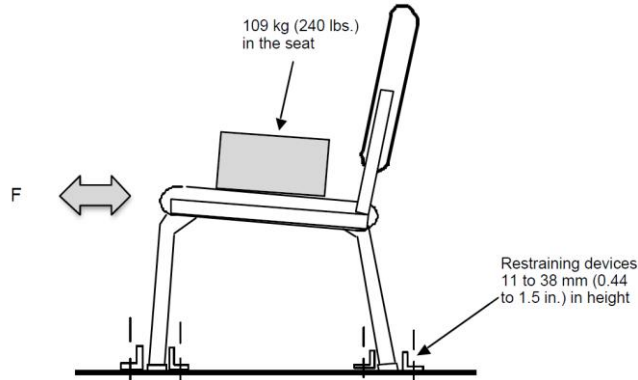
**ANSI/BIFMA X5.4:2020 Par. 24 Structural Durability Test – Side-to-Side - Cyclic**



Load (kg)	Horizontal force (N)	Cycles	Frequency (cycles per minute)	Rating
109	334	25.000	10	P

Note: Test performed on sample as 22<sup>th</sup> test on this sample.

**ANSI/BIFMA X5.4:2020 Appendix M - Structural Durability Test – Front-to-Back - Cyclic (Informative)**



Load (kg)	Horizontal force (N)	Cycles	Frequency (cycles per minute)	Rating
109	334	25.000	10 to 20	NA

**Note:** Weight: 22,3 kg / 49.16 lbs (Greater than 10 kg);

**Key:**

- P** = PASS, the sample MEETS the standard requirement.
- F** = FAIL, the sample DOES NOT MEET the standard requirement.
- NA** = NON APPLICABILE, the requirement/test IS NOT APPLICABLE to the sample.
- NR** = NOT REQUESTED, On Customer request the test is NOT PERFORMED.
- NP** = General note (see details).
- ND** = NOT DECLARED.
- //** = The rating of test CANNOT BE EXPRESSED, see details in test report

**END OF TEST REPORT**