



Test Report: 4791551401.1

APPLICANT

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



Product: ANSI/BIFMA X5.4-2020 - Magna
2.0 - 3 seater

DATE

Sample in:	7/11/2024	(dd/mm/yyyy)
Tests start:	9/11/2024	(dd/mm/yyyy)
Tests end:	3/12/2024	(dd/mm/yyyy)
Report issue:	4/12/2024	(dd/mm/yyyy)

OVERALL DIMENSIONS:

Measured:	Depth:	830 mm;	Height:	760 mm;
	Width:	2000 mm;	Weight:	81,6 kg;
Nominal	Depth:	ND;	Height:	ND;
	Width:	ND;	Weight:	ND;

Sample number 7801804 **Order number:** 15559677

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 multiple seat of class A (Style A - with arms and with backrest)

Technician
Rodolfo Sala

Laboratory Manager
Matteo Longoni

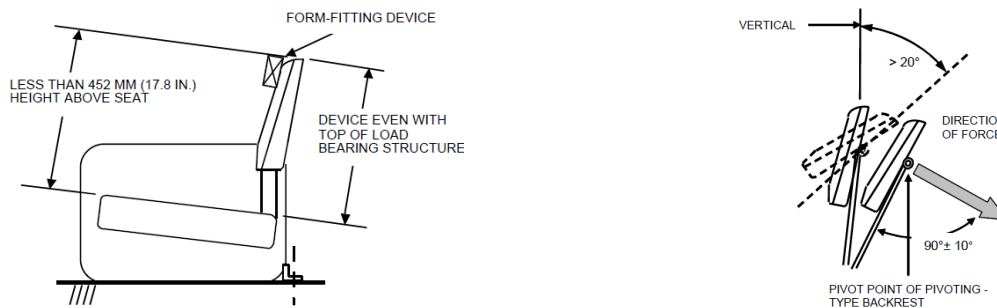
*Note: any copy, even partial, of this report, and any change or alteration to it are strictly forbidden.
The test results listed in this report are relevant only for the tested sample. Sampling performed by the customer.*

Seating properties		
Length of the seat [mm]	Number of seating positions (nearest whole number to length divided by 771)	Single seat length (mm)
1570	2*	785

Note: declared as 3 seater by customer.

Tested backrest is of PIVOT type: No

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



Test has been performed pushing the backrest backwards

Backrest height: 420 mm

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 1st test on this sample. The test has been performed on two backrest adjacent (end and adjacent) (3 or more positions).

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

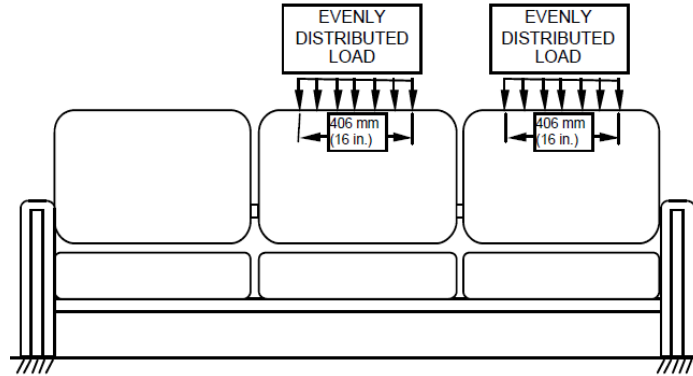
Note: Test performed on sample as 2nd test on this sample. The test has been performed on two backrest adjacent (end and adjacent) (3 or more positions).



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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 4th test on this sample. The test has been performed on two backrest adjacent (end and adjacent) (3 or more positions).

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

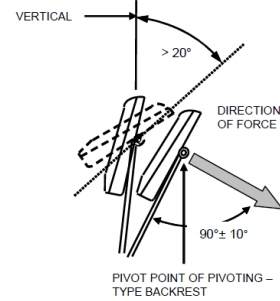
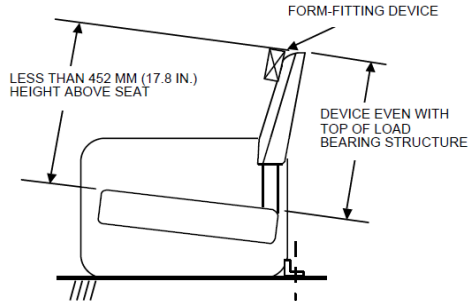
Note; Test performed on sample as 5th test on this sample. The test has been performed on two backrest adjacent (end and adjacent) (3 or more positions).



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



Test has been performed pushing the backrest backwards

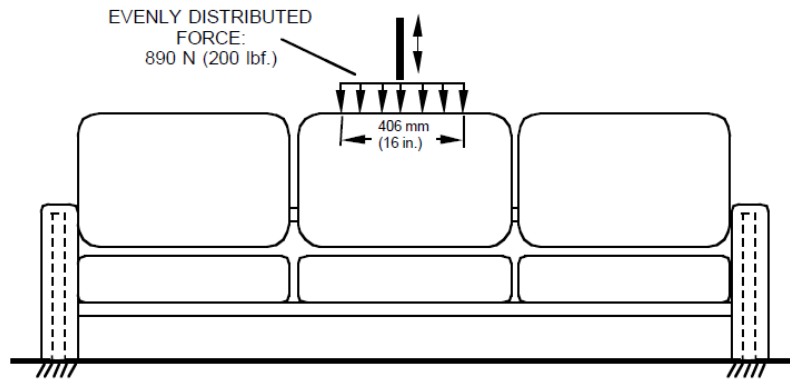
Backrest height: 420 mm

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 3rd test on this sample. The test has been performed on two backrest adjacent (end and adjacent) (3 or more positions).

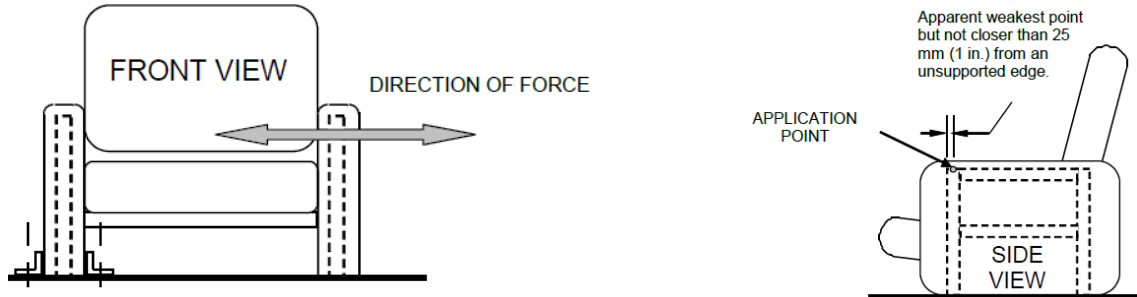
ANSI/BIFMA X5.4:2020 Par. 8 Backrest Durability Test - Vertical - Cyclic



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

Note: Test performed on sample as 6th test on this sample. The test has been performed on two backrest adjacent (end and adjacent) (3 or more positions).

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



Width of the belt used: 25 mm

Distance from the backrest to loading point on the arm: 25 mm

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

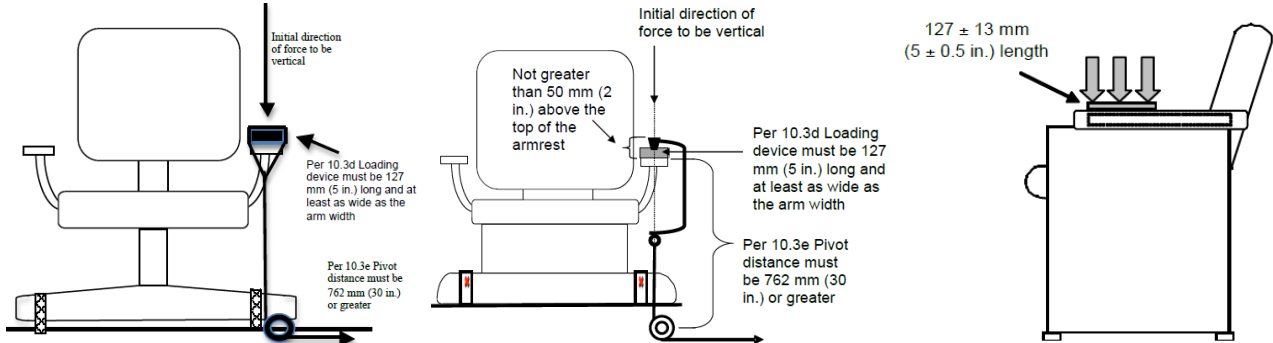
Functional Load					
Distance between armrests (mm)	Applied force (N)	Direction	Time of application (sec)	Cycles	Rating
< 889	445	Inward	60	1	NA
	445	Outward	60	1	NA
> 889	592	Inward	60	1	P
	592	Outward	60	1	P

Note: Test performed on sample as 7th test on this sample. The forces inward and outward have been performed on the same armrest.

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

Note: Test performed on sample as 8th test on this sample. The forces inward and outward have been performed on the same armrest.

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



Distance from the backrest to the loading point: 550 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	NA
> 75	890	60	1	P

Note: Test performed on sample as 9th test on this sample.

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

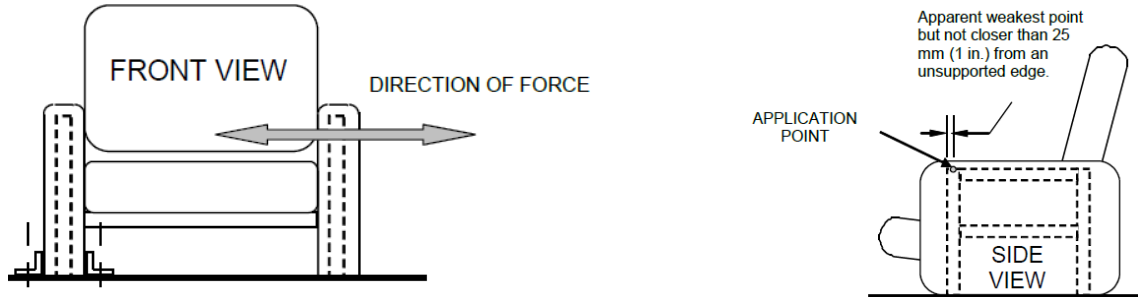
Note: Test performed on sample as 10th test on this sample.



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



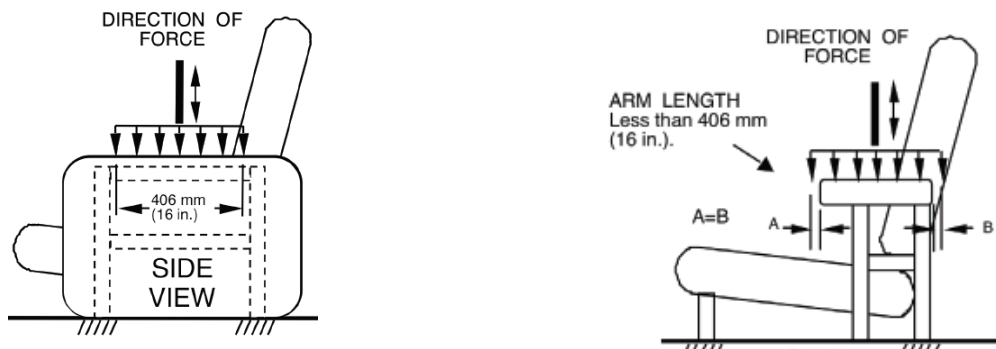
Width of the belt used: 25 mm

Distance from the backrest to loading point on the arm: 25 mm

Applied force (N)	Frequency (cycles per minute)	Cycles	Rating
445	10	50.000	P

Note: performed on sample as 11th test on this sample.

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



Distance from the backrest to the loading point: 550 mm

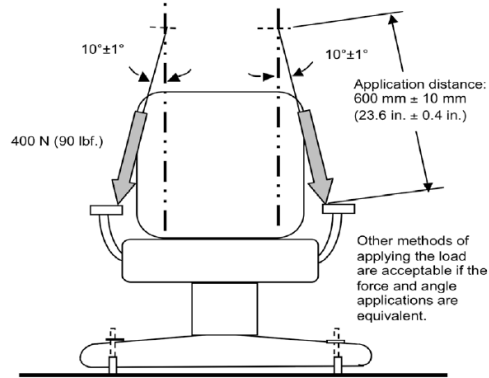
Armrest length: 620 mm

Length of the loaded area: 406 mm

Applied force (N)	Frequency (cycles per minute)	Cycles	Rating
667	10	10.000	P

Note: Test performed on sample as 12th test on this sample.

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

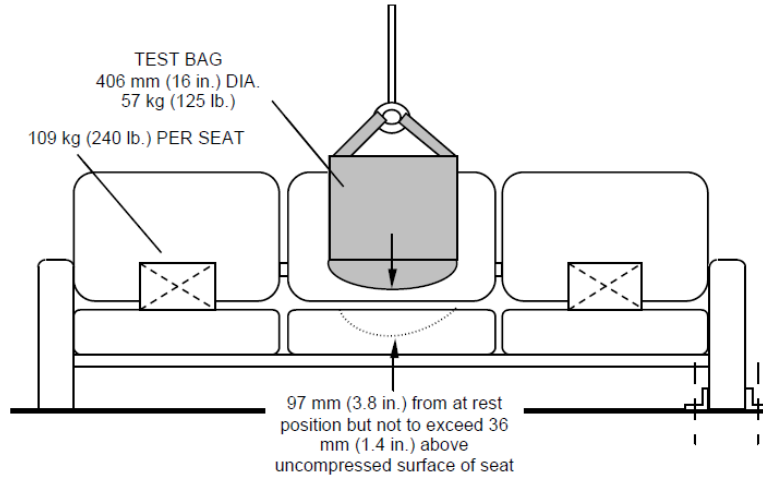


Distance between the inner edge of the armrest and the loading point: 25 mm
 Angle inclination of force: 10 °

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

Note: Test performed on sample as 13th 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 (IFD al 25% di 200 N ± 22 N)

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

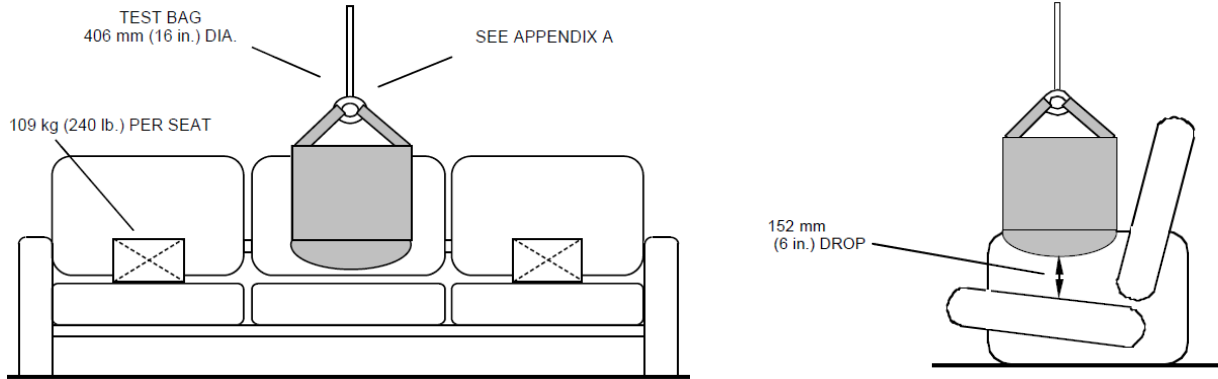
Weight of bag (kg)	Height of fall from “at rest” position (mm)	Cycles	Frequency (cycles / minute)	Rating
57	36	100.000	10	P

Note: Test performed on sample as 14th 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	P

Note: Test performed on sample as 15th test on this sample. The test was repeated since the sample is 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	3	152	102	1	P

Note: Test performed on sample as 16th test on this sample. The test has been performed on each sitting position in sequence.

Proof load

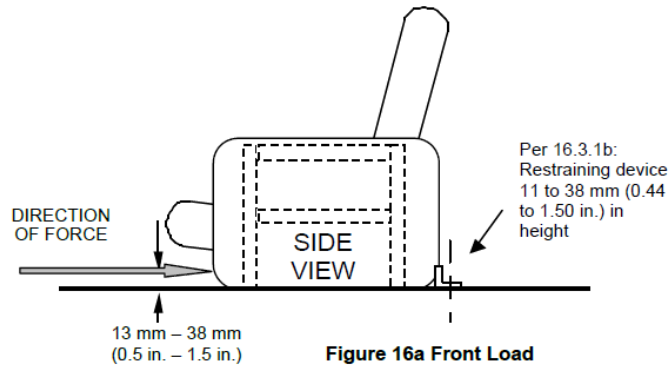
Applied load to sitting places not under tested (kg)	Number of sitting places tested	Drop height above uncompressed seat (mm)	Impact mass (kg)	Cycles	Rating
136	3	152	136	1	P

Note: Test performed on sample as 17th 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: < 25 mm

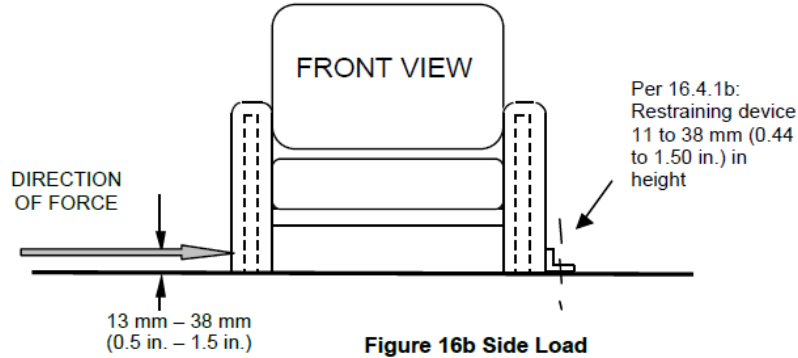
Functional load			
Horizontal force (N)	Time of application (sec)	Cycles	Rating
334	60	1	P

Note: Test performed on sample as 18th 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 19th 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: < 25 mm

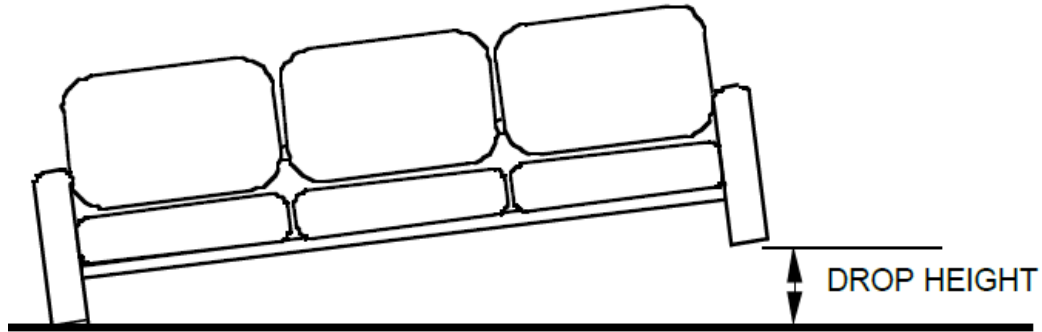
Functional load			
Horizontal force (N)	Time of application (sec)	Cycles	Rating
334	60	1	P

Note: Test performed on sample as 20th 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 21th test on this sample.

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

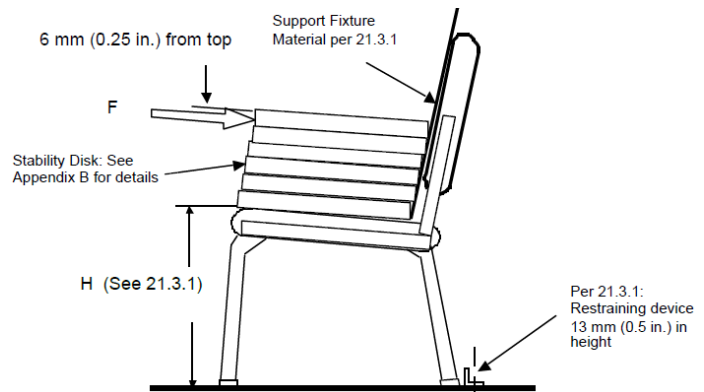
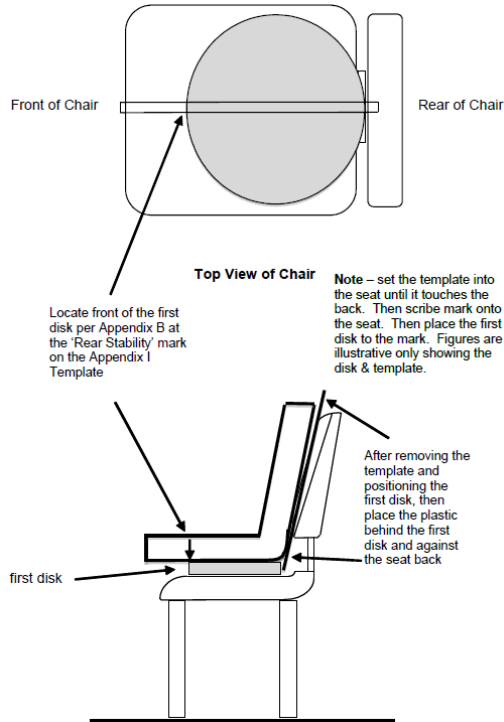


Sample weight (kg)	Drop height (mm)	Cycles	Side	Rating
< 45	180	1	Left	NA
		1	Right	NA
45 - 90	120	1	Left	P
		1	Right	P
> 90 – 136	60	1	Left	NA
		1	Right	NA
> 136	Non applicabile	-	-	NA

Note: Test performed on both sides of the sample. Test performed on sample as 22th 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



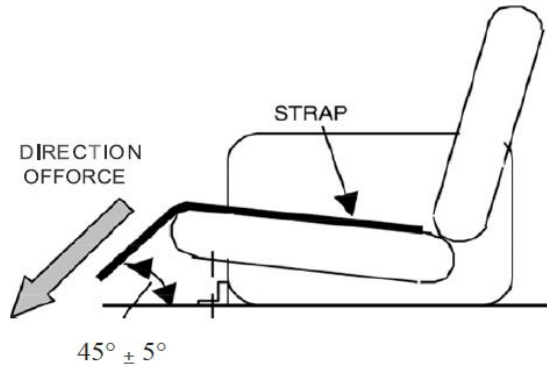
Force has been applied : On top of disks

Applied discs on seat	Horizontal force (N)	Loading point	Rating
6	148	On top of disks	P

Note: The horizontal force was determined by the following formula: $F = 0,1964 (1195 - H)$, when H found is: 440 mm.

Test performed on sample as 23th test on this sample.

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

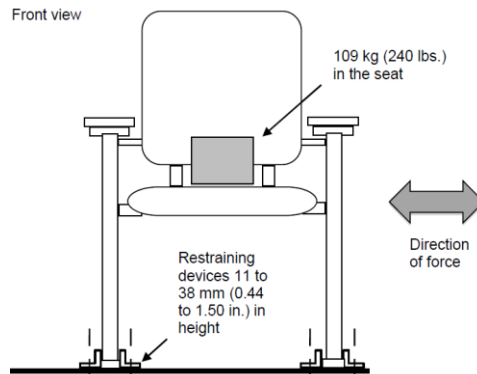


Width of the belt used for the test: 75 mm

Applied force - Downward (N)	Rating
>142 (250 applied)	P

Note: Test performed on sample as 24th test on this sample.

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 25th test on this sample.



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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