



## Test Report: 4790866033.1

### APPLICANT

Name: Pineapple Contracts Unlimited

Address: Westmead  
Aylesford, ME20 6XJ  
United Kingdom

Product: ANSI/BIFMA X5.4 - OHIO PLUS  
Plus Curve chair



### DATE

Sample in:	16/10/2023	(dd/mm/yyyy)
Tests start:	16/10/2023	(dd/mm/yyyy)
Tests end:	3/11/2023	(dd/mm/yyyy)
Report issue:	6/11/2023	(dd/mm/yyyy)

### OVERALL DIMENSIONS:

Measured:	Depth:	870 mm;	Height:	845 mm;
	Width:	1010 mm;	Weight:	23,0 kg;
Nominal	Depth:	ND;	Height:	ND;
	Width:	ND;	Weight:	ND;
Sample number	6112930	Order number:	14817810	

### 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  $21 \pm 6$  °C

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

The sample is classified as single seat of class: Style C - without arms and with backrest

Technician  
Rodolfo Sala

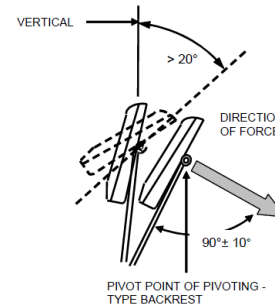
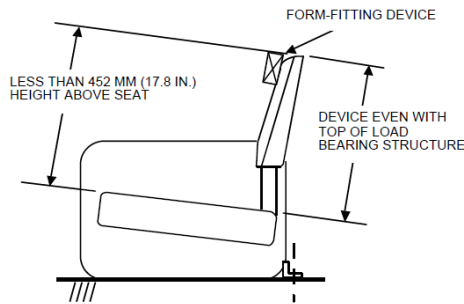
Laboratory Manager  
Matteo Longoni

*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)
420 (min) – 810 (max)	1	420 (min) – 810 (max)

**Note:** The number of seating has been calculated since this information was not provided by the 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:** 445 mm

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

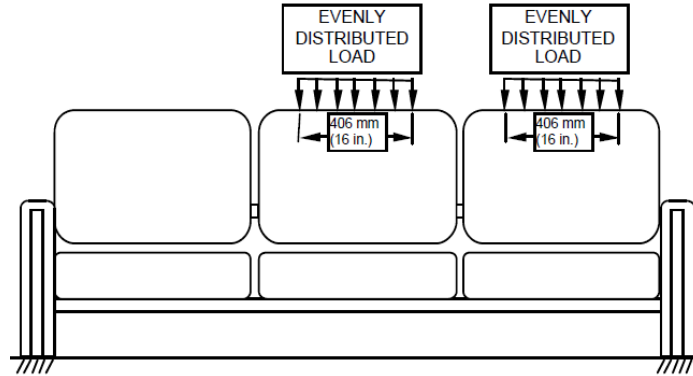
Functional Load			
Backrest load (N)	Time of application (sec)	Cycles	Rating
667	60	1	P

**Note:** Test performed on sample as 1<sup>st</sup> test on this sample. The test has been performed on two backrest positions (2 positions). The test has been performed simultaneously since the backrest are parallel.

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

**Note:** Test performed on sample as 2<sup>nd</sup> test on this sample. The test has been performed on two backrest positions (2 positions). The test has been performed simultaneously since the backrest are parallel.

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



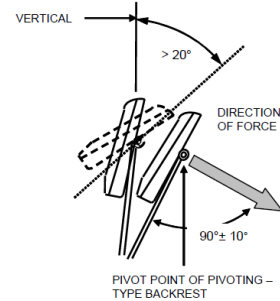
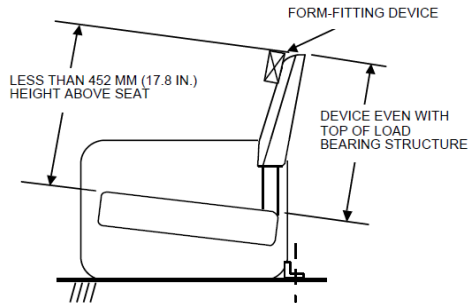
Functional Load			
Backrest load (N)	Time of application (sec)	Cycles	Rating
890	60	1	P

**Note;** Test performed on sample as 3<sup>rd</sup> test on this sample. The test has been performed on two backrest positions (2 positions). The test has been performed simultaneously since the backrest are parallel.

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

**Note;** Test performed on sample as 4<sup>th</sup> test on this sample. The test has been performed on two backrest positions (2 positions). The test has been performed simultaneously since the backrest are parallel.

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



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

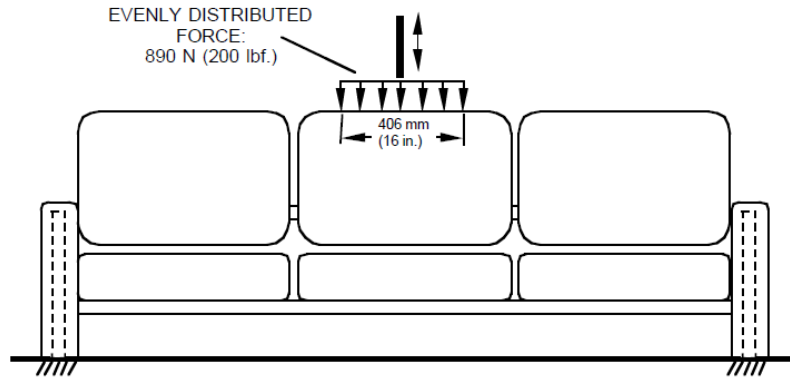
**Backrest height: 445 mm**

**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 5<sup>th</sup> test on this sample. The test has been performed on two backrest positions (2 positions). The test has been performed simultaneously since the backrest are parallel.

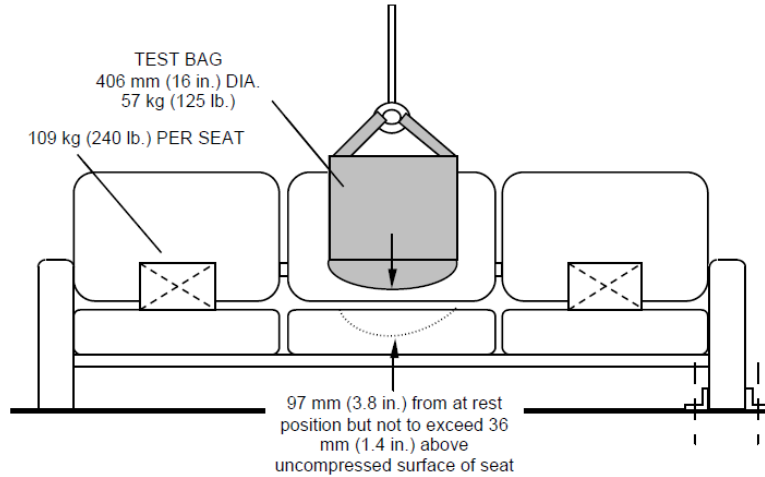
ANSI/BIFMA X5.4:2020 Par. 8 Backrest Durability Test - Vertical - Cyclic



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

**Note:** Test performed on sample as 6<sup>th</sup> test on this sample. The test has been performed on two backrest positions (2 positions). The test has been performed simultaneously since the backrest are parallel.

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:** 10 mm

**Vertical distance between the bottom of the bag in its “at rest” position and the uncompressed surface on the seat:** 36 mm (The free fall shall begin after lifting the test bag 97 mm (3.8 in.) above its “at rest” position, but not to exceed 36 mm (1.4 in.) above the uncompressed surface on the seat - as measured at the center of the seat)

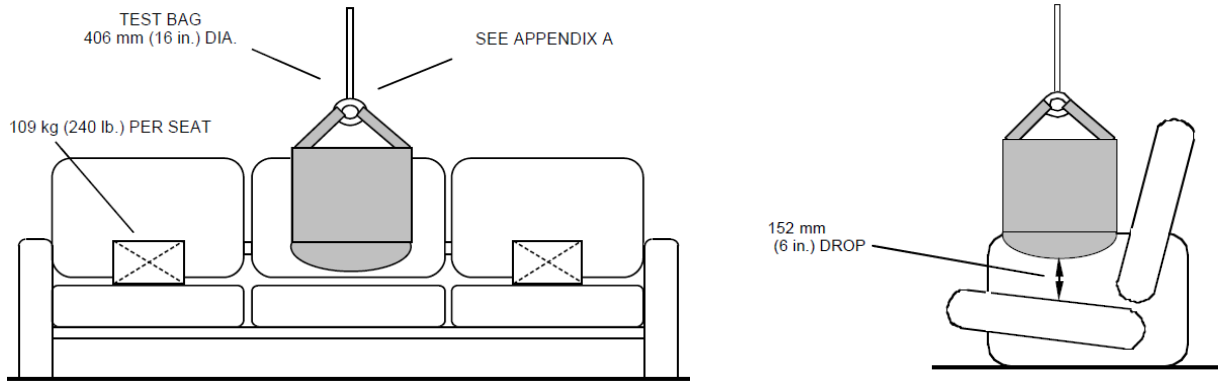
Weight of bag (kg)	Height of fall from “at rest” position (mm)	Cycles	Frequency (cycles / minute)	Rating
57	36	100.000	10	P

**Note:** Test performed on sample as 7<sup>th</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	P

**Note:** Test performed on sample as 8<sup>th</sup> test on this sample. The test was repeated since the sample is considered as 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	2	152	102	1	P

**Note:** Test performed on sample as 9<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	2	152	136	1	P

**Note:** Test performed on sample as 10<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**

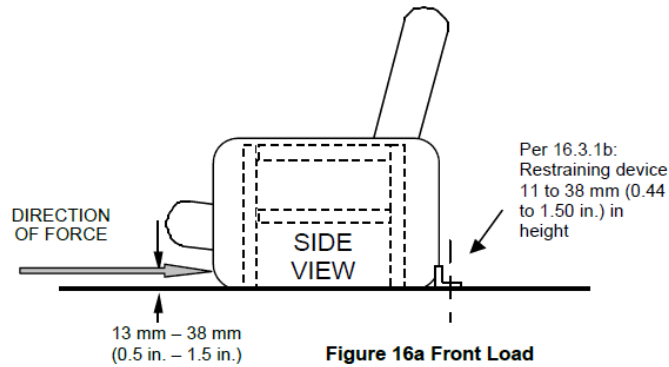


Figure 16a Front Load

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

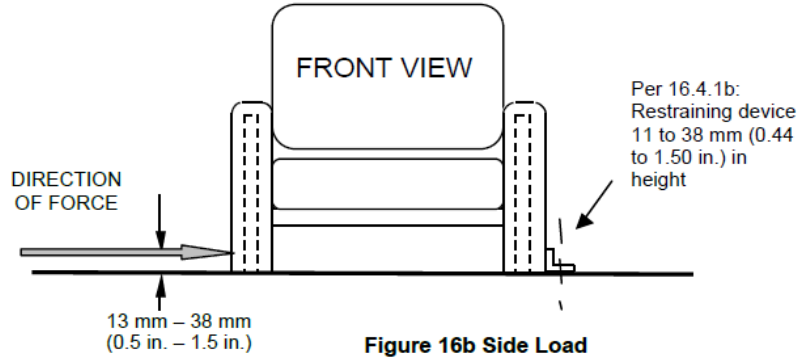
Note: Test performed on sample as 11<sup>th</sup> test on this sample.

Proof load			
Horizontal force (N)	Time of application (sec)	Cycles	Rating
503	60	1	P

Note: Test performed on sample as 12<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

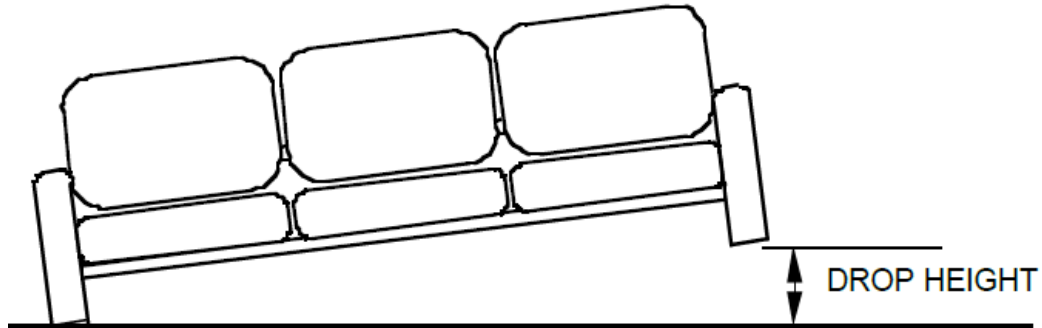
Functional load			
Horizontal force (N)	Time of application (sec)	Cycles	Rating
334	60	1	P

**Note:** Test performed on sample as 13<sup>th</sup> test on this sample.

Proof load			
Horizontal force (N)	Time of application (sec)	Cycles	Rating
503	60	1	P

**Note:** Test performed on sample as 14<sup>th</sup> test on this sample.

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

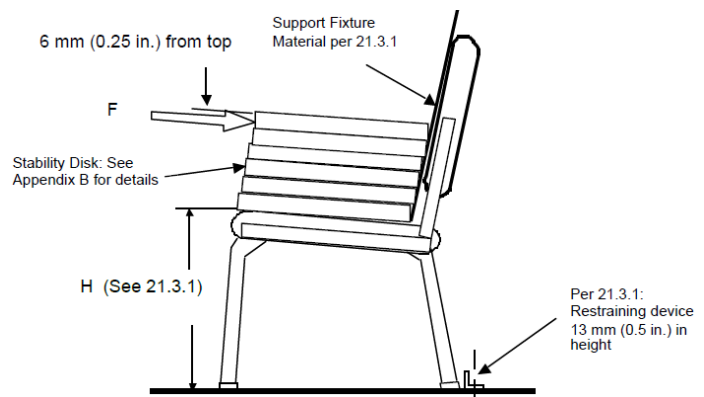
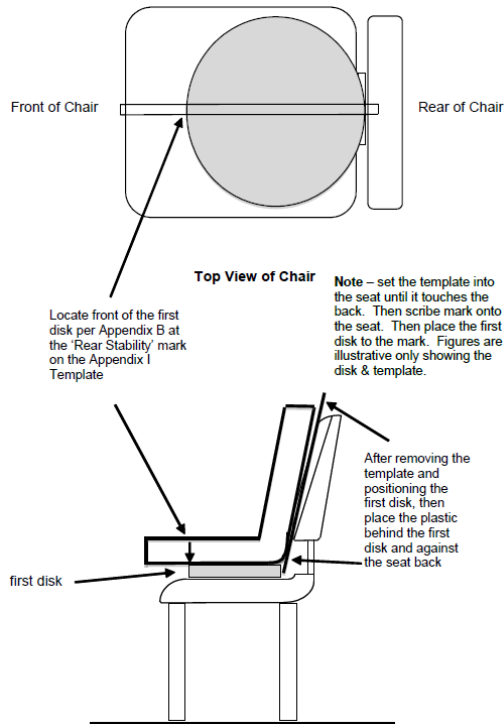


Sample weight (kg)	Drop height (mm)	Cycles	Side	Rating
< 45	180	1	Left	P
		1	Right	P
45 - 90	120	1	Left	NA
		1	Right	NA
> 90 – 136	60	1	Left	NA
		1	Right	NA
> 136	Non applicabile	-	-	NA

**Note:** Test performed on both sides of the sample. Test performed on sample as 15<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**

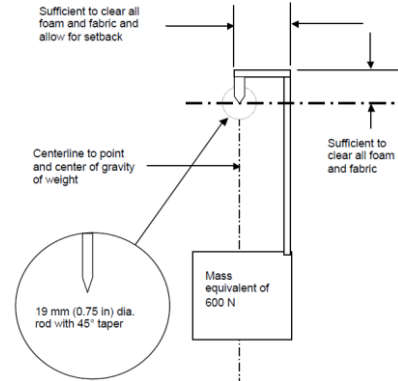
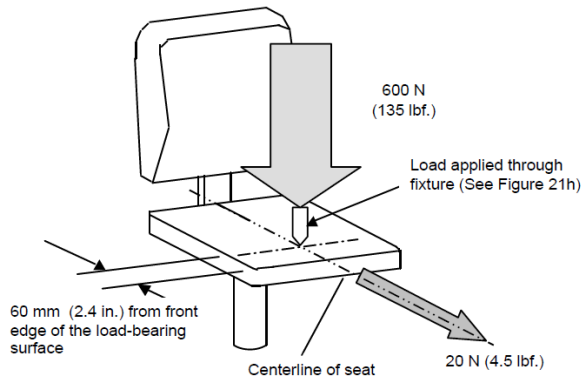
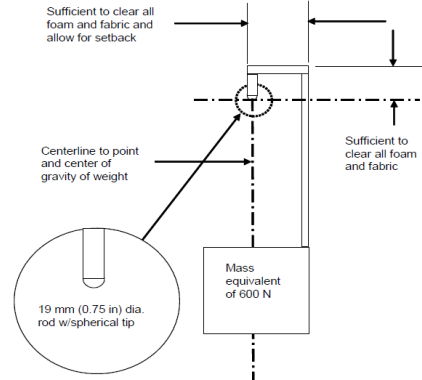
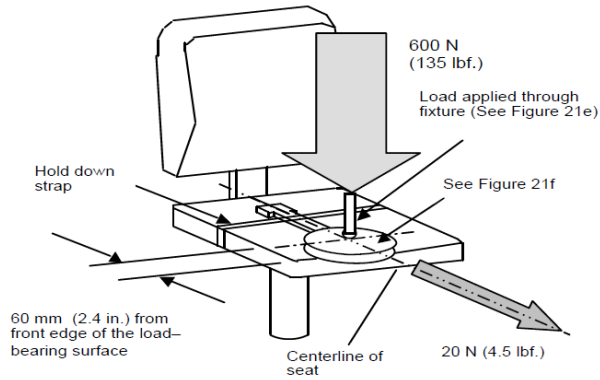


**Force has been applied :** On top of disks

Applied discs on seat	Horizontal force (N)	Loading point	Rating
6	141.5	On top of disks	P

**Note:** The horizontal force was determined by the following formula:  $F = 0,1964 (1195 - H)$ , when H found is: 475 mm. Test performed on sample as 16<sup>th</sup> test on this sample.

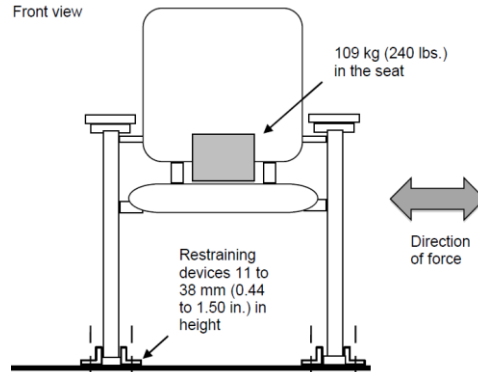
**ANSI/BIFMA X5.4:2020 Par. 21.5 Front Stability for Units Less than 36.3 kg (80 lbs.)**



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

**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**