

# TEST REPORT: 4788141732.1

## APPLICANT

**Name:** Ivars SpA  
**Address:** Via Gargna, 23/A  
Vestone, BS 25078  
Italy

**Product:** Sedia COLLEGE - Ansi Bifma  
X5.1:2017



## DATE

**Sample in:** 8/9/2017  
**Tests start:** 8/9/2017  
**Tests end:** 6/10/2017  
**Report issue:** 6/10/2017

## OVERALL DIMENSIONS:

<b>Measured:</b>	<b>Depth:</b>	840 mm;	<b>Height:</b>	970 mm
	<b>Width:</b>	820 mm	<b>Weight:</b>	12,2 kg
<b>Nominal:</b>	<b>Depth:</b>	ND;	<b>Height:</b>	ND;
	<b>Width:</b>	ND;	<b>Weight:</b>	ND;

**Sample number** 1142955  
1150001 **Order Number:** 11940850

## REFERENCE STANDARD

**ANSI/BIFMA X5.1:2017 General-Purpose Office Chairs - Tests.**

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

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

Tests have been performed on a temperature of  $21 \pm 2$  °C

The tests have been performed on 2 samples as requested by the customer

The backrest tested is PIVOT: NO

The sample is classified as Type: III

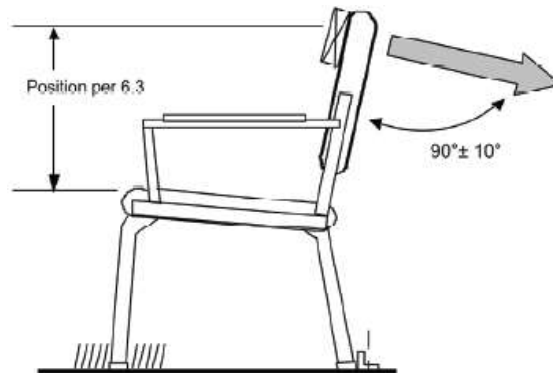
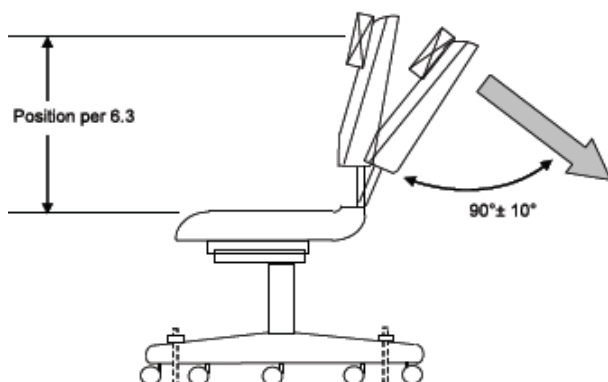
**Technician**  
Rodolfo Sala

**Laboratory Manager**  
Matteo Longoni

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## Backrest Strength Test - Static - Type II &amp; III ANSI/BIFMA X5.1:2017 Par. 6



Test has been performed pulling the backrest backwards

Backrest height: 460 mm

Loading pad height measured from the seat: 406 mm

Functional Load			
Backrest force (N)	Time of test (sec)	N° cycle	Rating
667	60	1	P

Note: first test performed on sample 1150001.

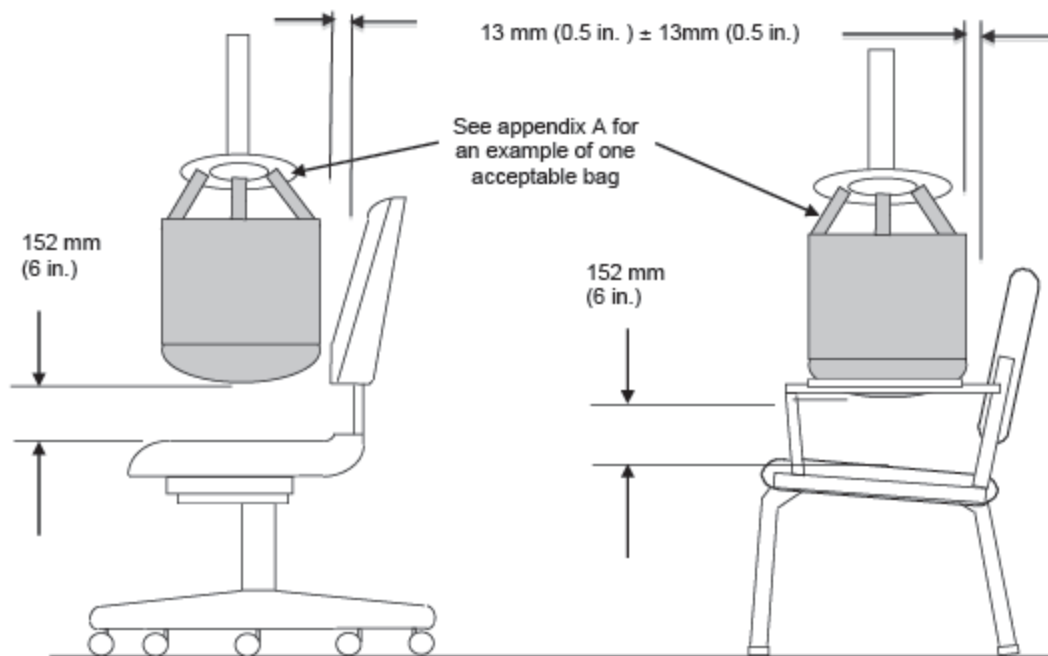
Proof Load			
Backrest force (N)	Time of test (sec)	N° cycle	Rating
1001	60	1	P

Note: first test performed on sample 1150001.

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## Drop Test - Dynamic ANSI/BIFMA X5.1:2017 Par. 7



Functional Load					
Seat	The distance between the bag and the backrest	Drop height (mm)	Weight of bag (kg)	N° cycle	Rating
Fixed position	13 mm	152	102	1	P

**Note:** first test performed on sample 1142955.

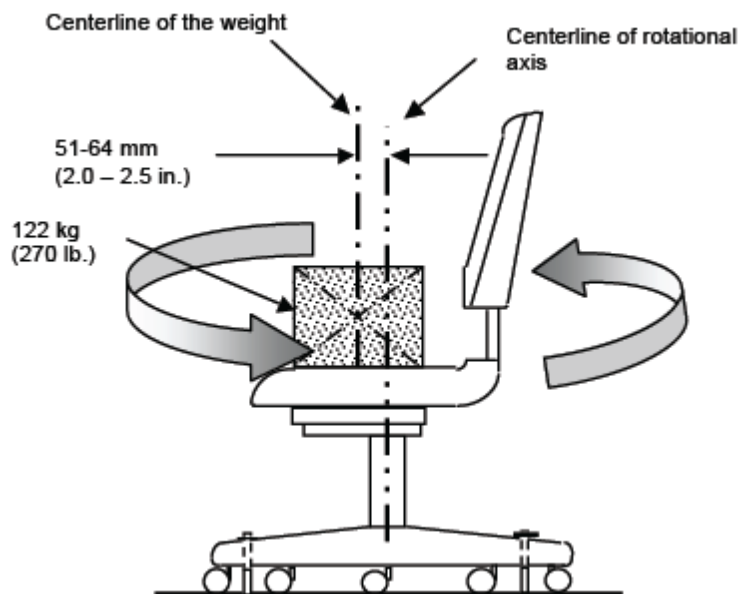
Proof Load					
Seat	The distance between the bag and the backrest	Drop height (mm)	Weight of bag (kg)	N° cycle	Rating
Fixed position	13 mm	152	136	1	P

**Note:** first test performed on sample 1142955.

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## Swivel Test – Cyclic ANSI/BIFMA X5.1:2017 Par. 8



**Maximum angle of rotation:** 360 °

**The distance between the center of gravity of the load and the axis of rotation:** 51 mm

**The rotation was made** in two senses, alternating for each cycle

Seat	Load (kg)	Frequency (rotations per minute)	N° cycle	Rating
Fixed height	122	10	120.000	P

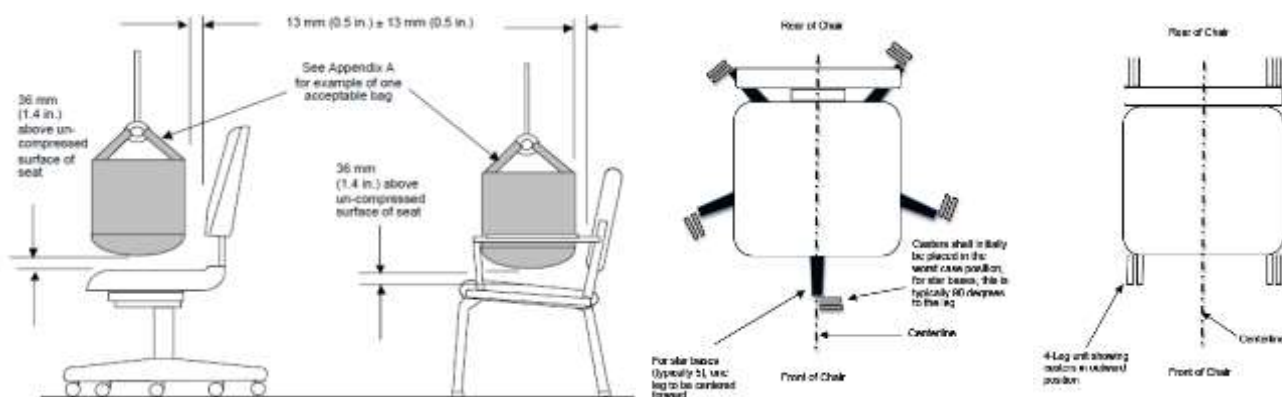
**Note:** fourth test performed on sample 1142955.

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## Seating Durability Tests – Cyclic ANSI/BIFMA X5.1:2017 Par. 10

## Impact Test ANSI/BIFMA X5.1:2017 Par. 10.3



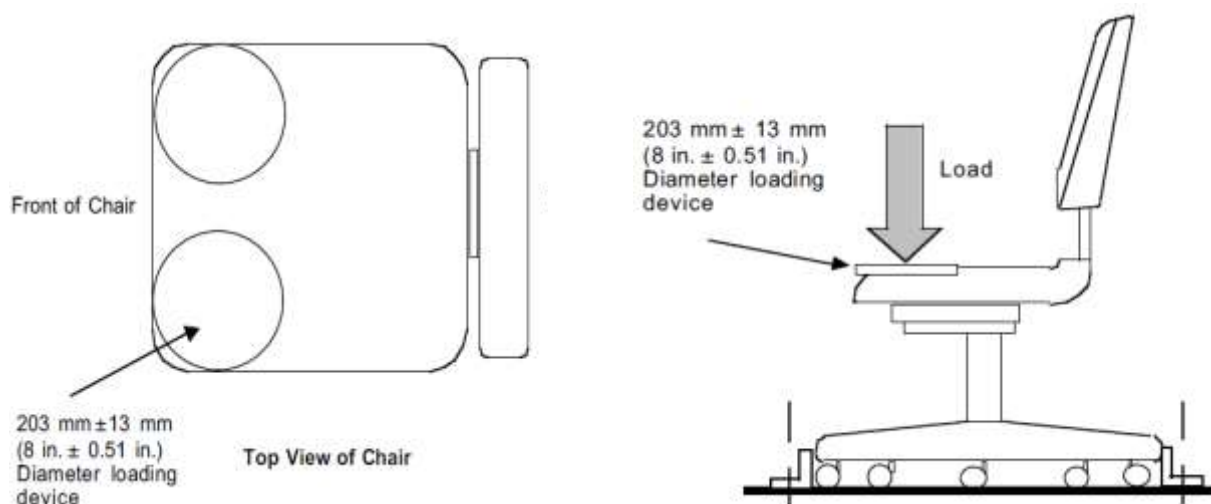
Minimum thickness of cushiony materials of seat: 0 mm

Thickness of additional foam: 50 mm (IFD al 25% di 200 N ± 22 N)

Distance between the bag and the backrest: 13 mm

Weight of bag (kg)	Height of fall (mm)	N° cycle	Frequency (cycle / minute)	Rating
57	36 mm	100.000	15	P

Note: second test performed on sample 1142955.

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**Front Corner Load-Ease Test – Cyclic – Off-center ANSI/BIFMA X5.11:2017 Par. 10.4**


The test has been performed for 40,000 cycles alternated on the corners of the front edge (20,000 cycles for each corner)

Seating load (N)	N° cycle	Cycle frequency (cycle / minute)	Rating
890	40.000	15	P

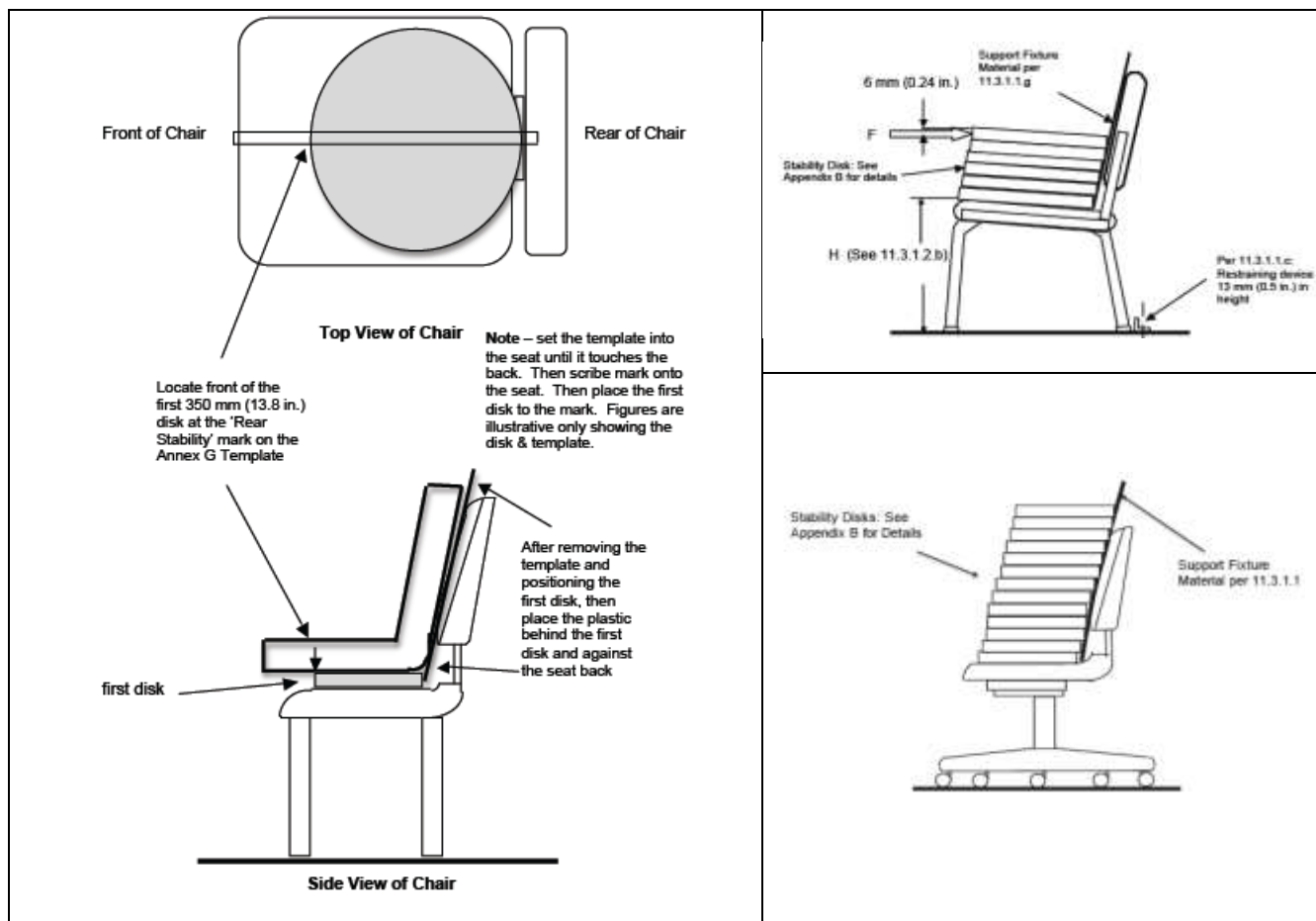
**Note:** third test performed on sample 1142955.

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Stability Test ANSI/BIFMA X5.1:2017 Par. 11

Rear Stability ANSI/BIFMA X5.1:2017 Par. 11.3



All adjustment of the chair mechanisms were set in the most unfavorable condition, such as:  
 rearmost seat or backrest position, or both,  
 the least stable condition of casters or glides and tilt mechanism.

**Force has been applied** : on top of the weight

Type III:

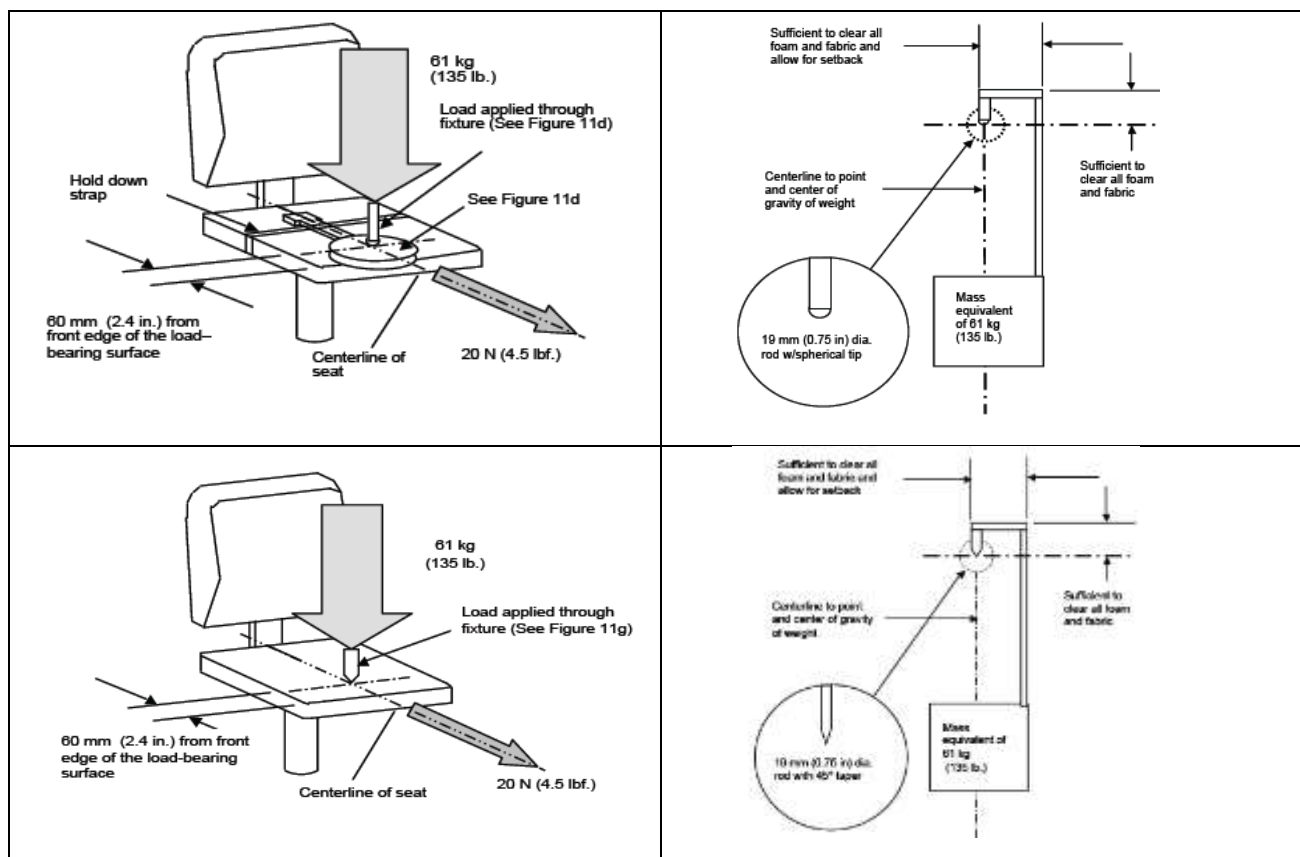
Applied discs on seat (N)	Horizontal force (N)	Loading point	Rating
6	149	top of the weight	P

**Note:** sixth test performed on sample 1150001. The horizontal force was determined by the following formula:  $F = 0,1964 (1195 - H)$ , when H found is: 435 mm.

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## Front Stability ANSI/BIFMA X5.1:2017 Par. 11.4



All adjustment of the chair mechanisms were set in the most unfavorable condition, such as:  
 rearmost seat or backrest position, or both,  
 the least stable condition of casters or glides or tilt mechanism.

Load seat (kg)	Loading point (mm)	Horizontal force (N)	Rating
61	60	20	P

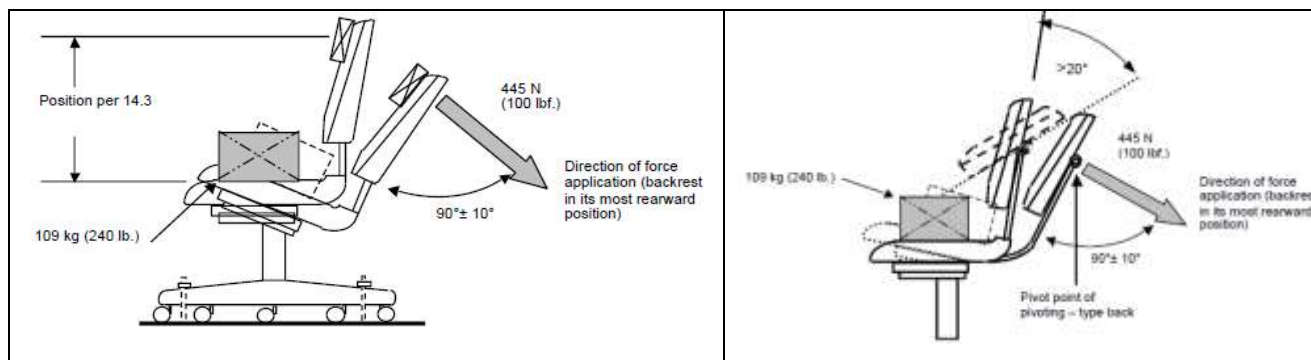
**Note:** seventh test performed on sample 1150001.



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### Backrest Durability Test - Cyclic - Type II and III ANSI/BIFMA X5.1:2017 Par. 15



Test has been performed pushing the backrest backwards

Backrest height: 460 mm

Loading pad height measured from the seat: 406 mm

Frequency: 15 cycles per minute

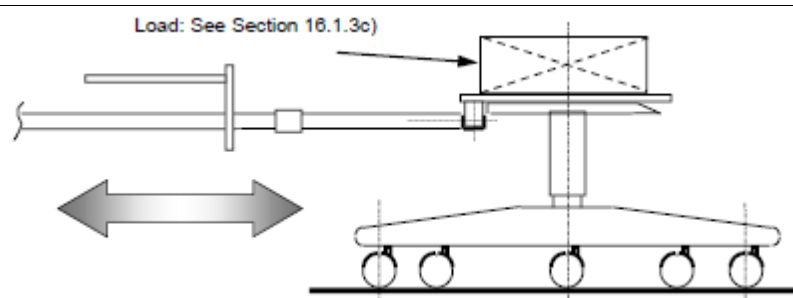
Width of the backrest: 385 mm

Width of the backrest ≤ 406 mm			
Load (kg)	Backrest force (N)	N° cycle	Rating
109	334	120.000	P

**Note:** second test performed on sample 1150001.

### Caster/Chair Base Durability Test – Cyclic ANSI/BIFMA X5.1:2017 Par. 16

#### Caster/Chair Base Durability Test for Pedestal Base Chairs ANSI/BIFMA X5.1:2017 Par. 16.1



The test has been performed on the sample.

The load test has been applied and maintained in the center of the sample.

Distance traveled by the sample in each direction per cycle: 800 mm.

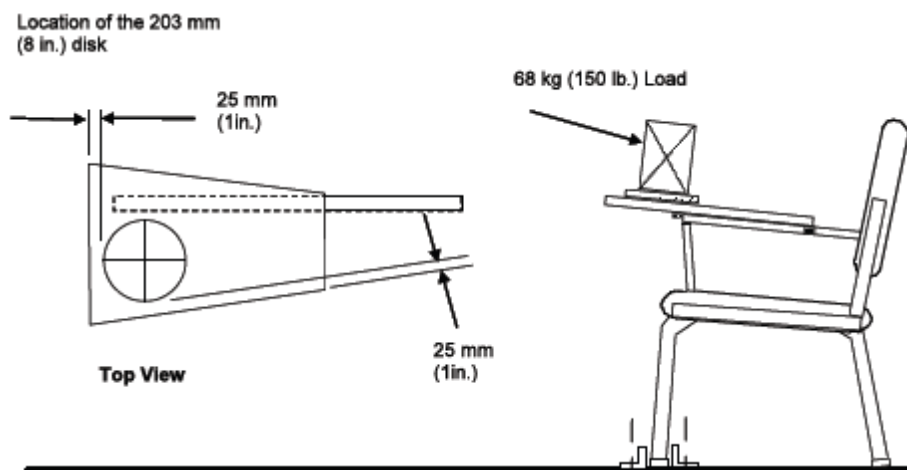
Step	Load (kg)	Frequency (cycle / minute)	N° cycle	Extraction force applied to the wheels (N)	Rating
With obstacles	122	10	2.000	22	P
Without obstacles		10	98.000		

**Note:** fifth test performed on sample 1142955.

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## Tablet Arm Chair Static Load Test ANSI/BIFMA X5.1:2017 Par. 22

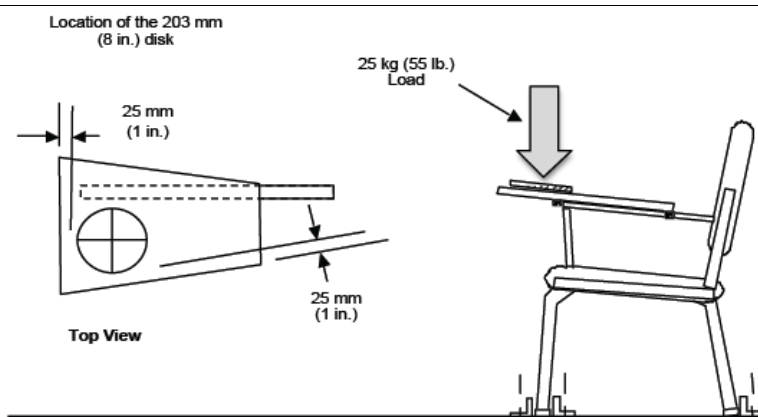


The distance from the load point measured from the edge of the tablet: 25 mm

Load (kg)	Time of test (sec)	Rating
68	60	P

Note: fourth test performed on sample 1150001.

## Tablet Arm Chair Load Ease Test – Cyclic ANSI/BIFMA X5.1:2017 Par. 23



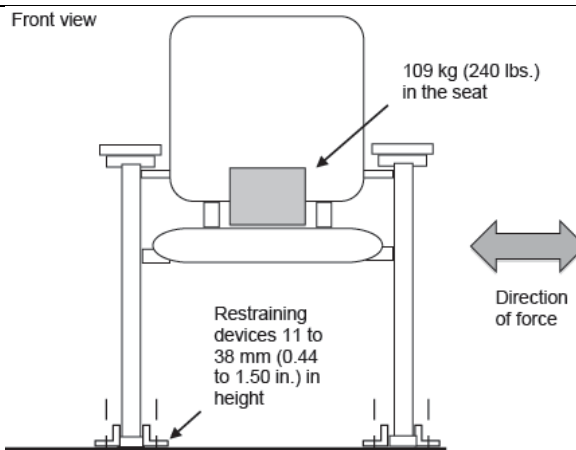
Load (kg)	N° cycle	Frequency (cycle per minute)	Rating
25	100.000	15	P

Note: fifth test performed on sample 1150001.

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## Structural Durability Test – Cyclic ANSI/BIFMA X5.1:2017 Par. 24



Load (kg)	Horizontal force (N)	N° cycle	Frequency (cycle per minute)	Rating
109	334	25.000	15	P

**Note:** third test performed on sample 1150001. Test performed on client request.

## 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

FINE RAPPORTO / END OF TEST REPORT