



LAB N° 1514



Furniture Business Division

TEST REPORT: 4787692475.1**APPLICANT**

Name: Sitta
Address: Camino de Molinaga 17
Loiu,
48180
Spain

Product: NEXO Ansi Bifma X5.1

**DATE**

Sample in: 9/1/2017
Tests start: 11/1/2017
Tests end: 8/2/2017
Report issue: 8/2/2017

OVERALL DIMENSIONS:

Measured:	Depth: 700 mm; Width: 730 mm	Height: 1500 mm Weight: 22,7 kg
Nominal:	Depth: ND; Width: ND;	Height: ND; Weight: ND;

666210
Sample number 741344 **Order Number:** 11537764
741342

REFERENCE STANDARD

ANSI/BIFMA X5.1:2011 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 ± 2 °C

The tests have been performed on 3 samples as requested by the customer

The backrest tested is PIVOT: NO

The sample is classified as Type: II

Technician
Rodolfo Sala

Laboratory Manager
Matteo Longoni

 Digitally signed
by Rodolfo Sala
Date:
2017.02.08
18:05:37 +01'00'

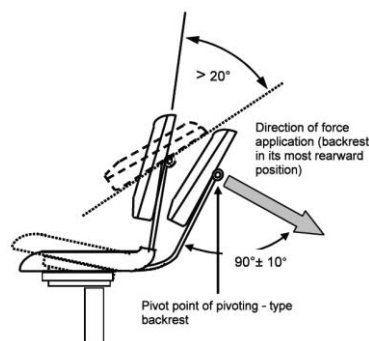
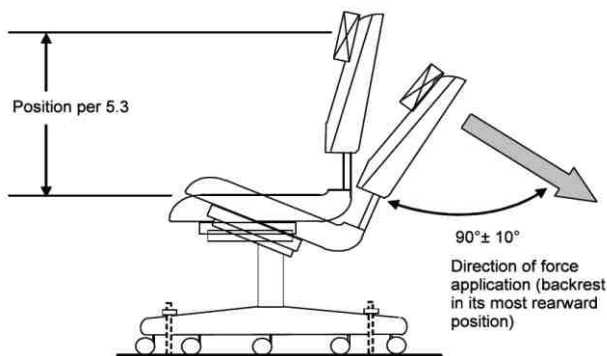
 Digitally signed
by Matteo
Longoni
Date: 2017.02.09
11:05:27 +01'00'

*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.*

TEST REPORT: 4787692475.1

Issued on:: 8/2/2017

Backrest Strength Test - Static - Type I ANSI/BIFMA X5.1:2011 Par. 5



Test has been performed pushing the backrest backwards
Backrest height: 650 mm
Loading pad height measured from the seat: 406 mm
Adjustment devices have been set on the normal condition.

Functional Load			
Backrest force (N)	Time of test (sec)	N° cycle	Rating
890	60	1	P

Note: sample tested 666210; third test performed on sample.

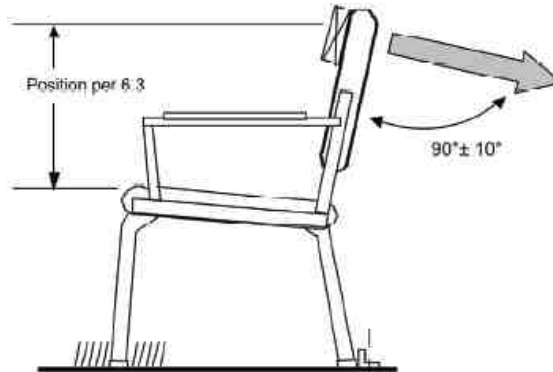
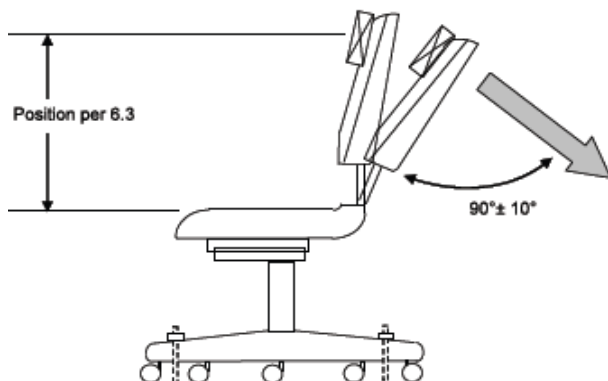
Proof Load			
Backrest force (N)	Time of test (sec)	N° cycle	Rating
1334	60	1	P

Note: sample tested 666210; third test performed on sample.

TEST REPORT: 4787692475.1

Issued on:: 8/2/2017

Backrest Strength Test - Static - Type II & III ANSI/BIFMA X5.1:2011 Par. 6



Test has been performed pushing the backrest backwards

Backrest height: 650 mm

Loading pad height measured from the seat: 406 mm

Adjustment devices have been set on the normal condition

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

Note: sample tested 666210; fourth test performed on sample.

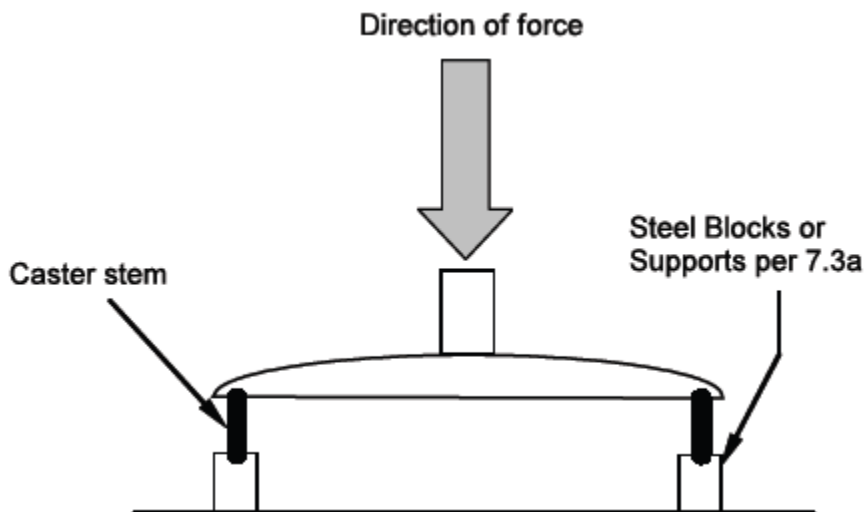
Proof Load			
Backrest force (N)	Time of test (sec)	N° cycle	Rating
1112	60	1	P

Note: sample tested 666210; fourth test performed on sample.

TEST REPORT: 4787692475.1

Issued on:: 8/2/2017

Base Test - Static ANSI/BIFMA X5.1:2011 Par. 7



Vertical Load (N)	N° cycle	Time of test	Rating
11.120	1	60	P

Note: fifth test performed on sample 741344.

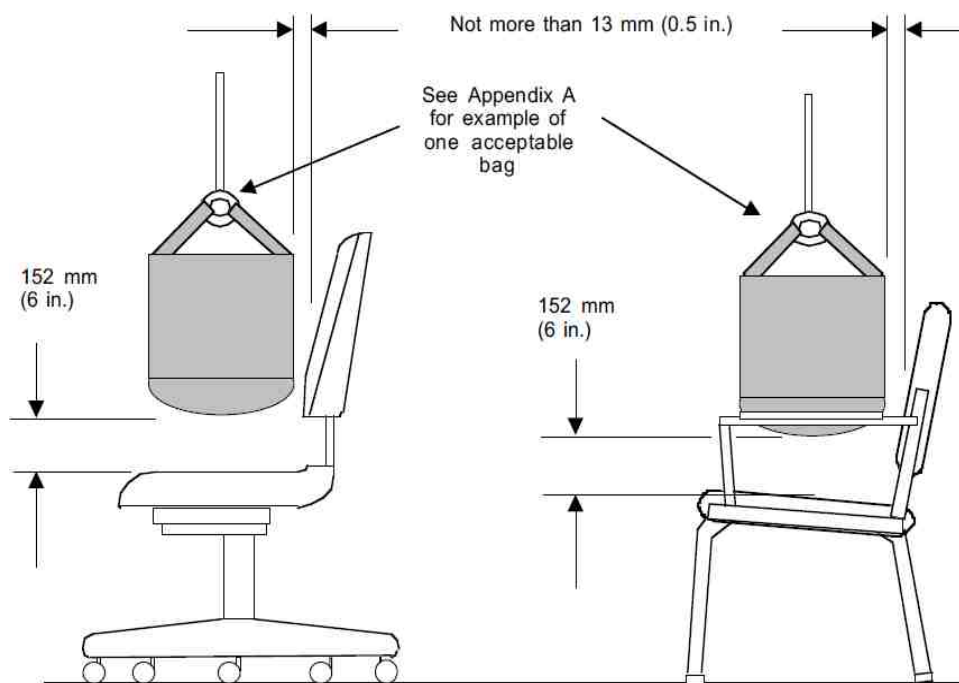
Vertical Load (N)	N° cycle	Time of test	Rating
11.120	1	60	P

Note: fifth test performed on sample 741344.

TEST REPORT: 4787692475.1

Issued on:: 8/2/2017

Drop Test - Dynamic ANSI/BIFMA X5.1:2011 Par. 8



Adjustment devices have been set on the normal condition

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

Note: second test performed on sample 741342.

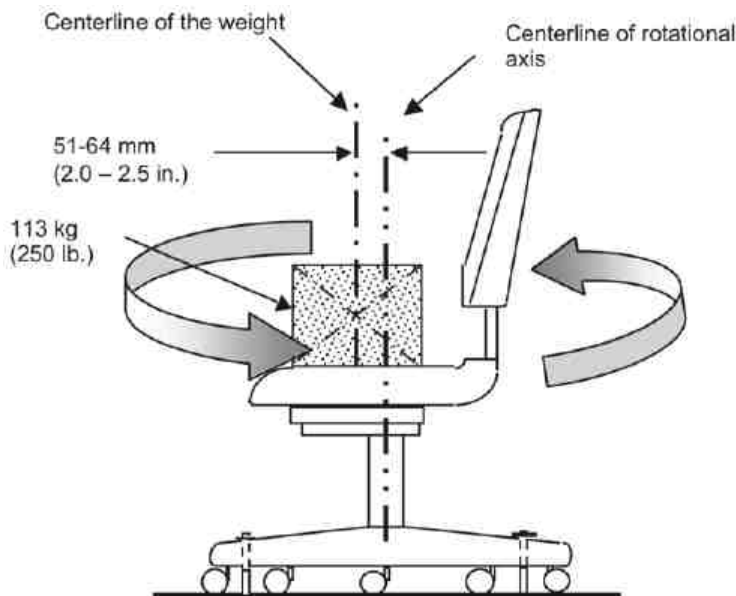
Proof Load				
The distance between the bag and the backrest (mm)	Drop height (mm)	Weight of bag (kg)	N° cycle	Rating
13	152	136	1	P

Note: second test performed on sample 741342.

TEST REPORT: 4787692475.1

Issued on:: 8/2/2017

Swivel Test – Cyclic ANSI/BIFMA X5.1:2011 Par. 9



Maximum angle of rotation: > 360 ° free rotation

The distance between the center of gravity of the load and the axis of rotation: 55 mm

The rotation was made: alternating for each cycle

Adjustment devices have been set on the normal condition

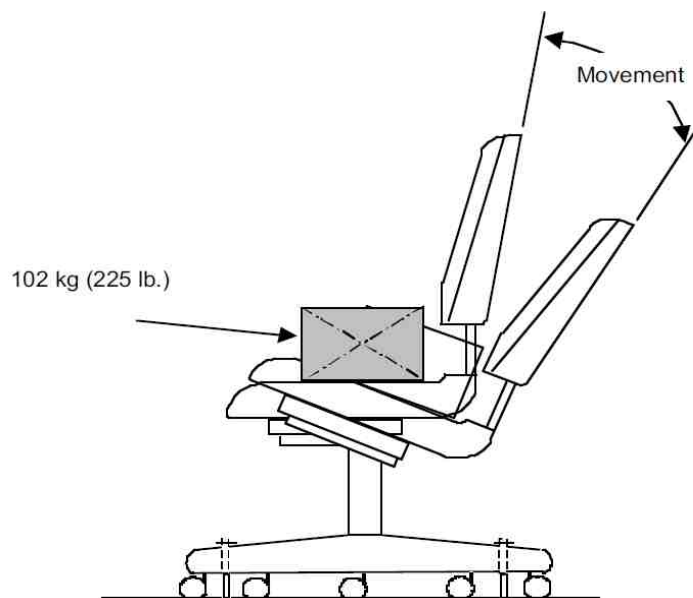
Load (kg)	Frequency (rotations per minute)	N° cycle	Rating
113	13.2	120.000	P

Note: . first test performed on sample 666210.

TEST REPORT: 4787692475.1

Issued on:: 8/2/2017

Tilt Mechanism Test – Cyclic ANSI/BIFMA X5.1:2011 Par. 10



The test has been performed by pulling back the backrest of the seat up to the maximum tilt position and then forward to the minimum inclination position
The test load has been applied and maintained at the center of the sitting Adjustment devices have been set on the normal condition

Load (kg)	N° cycle	Frequency	Rating
102	300.000	12	P

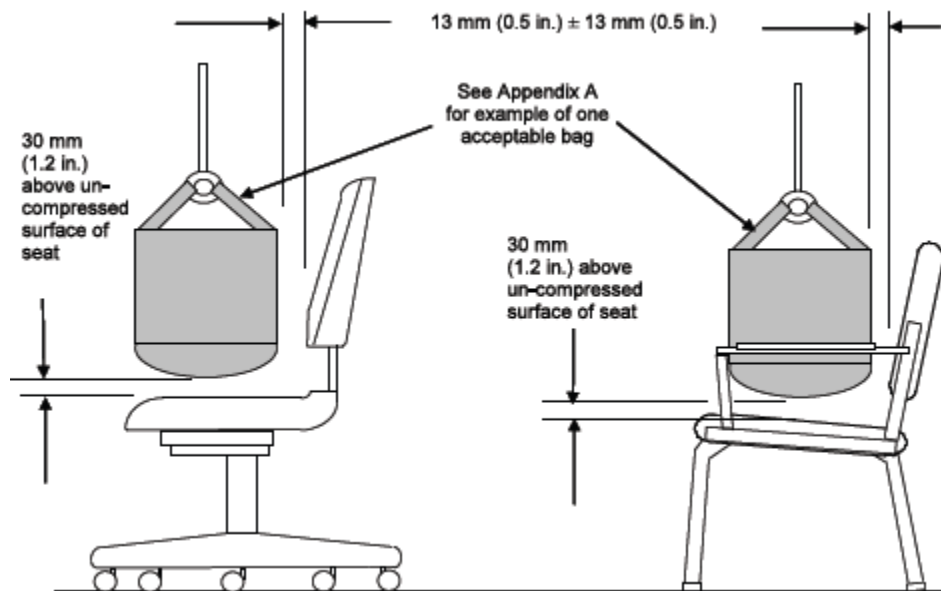
Note: first test performed on sample 741344.

TEST REPORT: 4787692475.1

Issued on:: 8/2/2017

Seating Durability Tests – Cyclic ANSI/BIFMA X5.1:2011 Par. 11

Impact Test ANSI/BIFMA X5.1:2011 Par. 11.3



Adjustment devices have been set on the normal condition

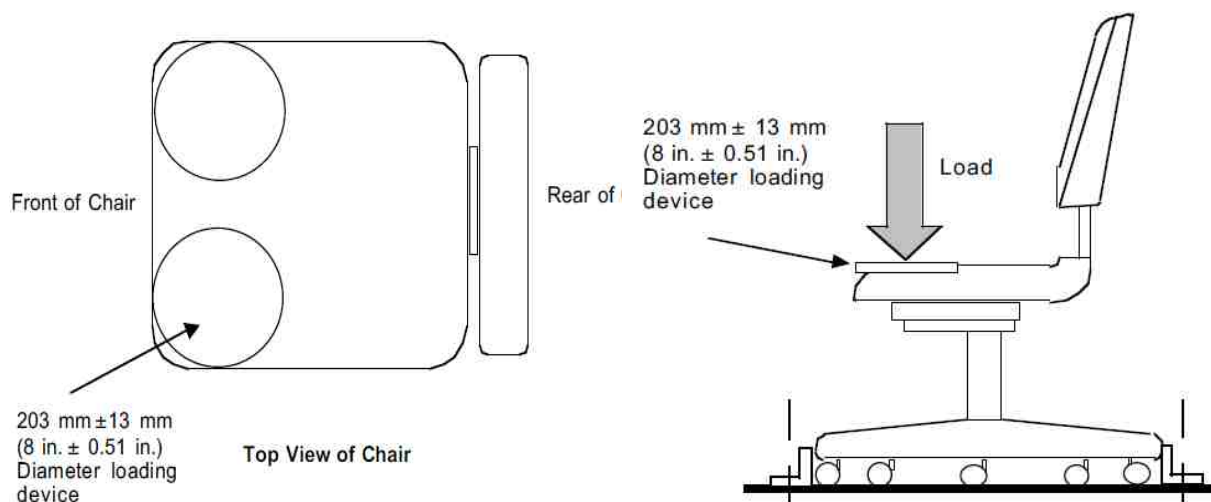
Minimum thickness of cushiony materials of seat: 50 mm

Thickness of additional foam: 0 mm (IFD al 25% di 200 N ± 22 N)

Distance between the bag and the backrest: 13 mm

Weight of bag (kg)	Height of fall (mm)	N° cycle	Frequency (cycle / minute)	Rating
57	30	100.000	12	P

Note: first test performed on sample 741342.

TEST REPORT: 4787692475.1
Issued on:: 8/2/2017
Front Corner Load-Ease Test – Cyclic – Off-center ANSI/BIFMA X5.11:2015 Par. 11.4


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

Adjustment devices have been set on the normal condition

Seating load (N)	N° cycle	Cycle frequency (cycle / minute)	Rating
734	40.000	15	P

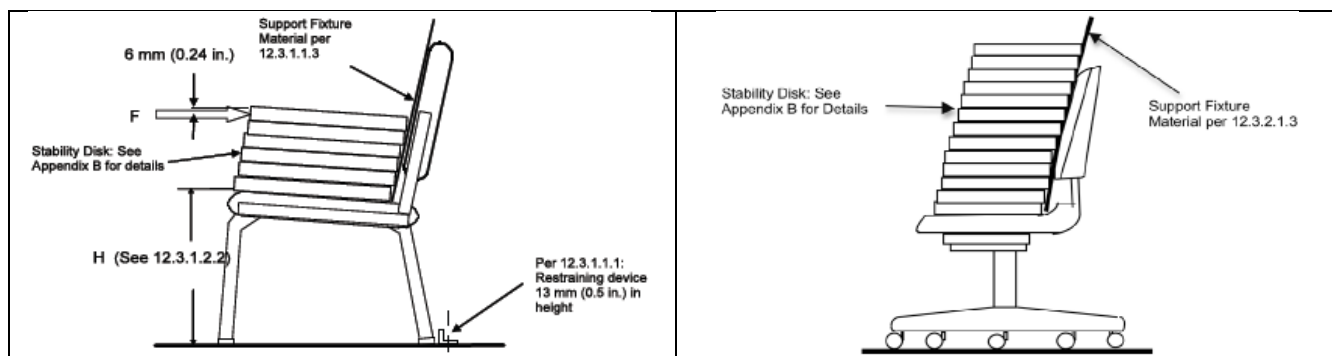
Note: second test performed on sample 741342.

TEST REPORT: 4787692475.1

Issued on:: 8/2/2017

Stability Test ANSI/BIFMA X5.1:2011 Par. 12

Rear Stability ANSI/BIFMA X5.1:2011 Par. 12.3



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

The test has been performed by pushing outward the backrest of the sample,
Force has been applied : on top of the weight:

Applied discs on seat (N)	Horizontal force (N)	Rating
6	125	P

Note: The horizontal force was determined by the following formula: $F = 0,1964 (1195 - H)$, when H found is: 560 mm.

fourth test performed on sample 741344.

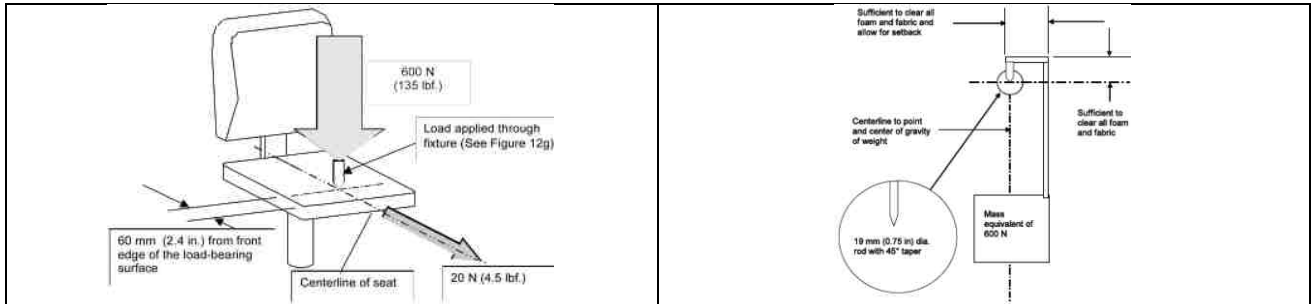
Disk	Rating
13	P

Note: fourth test performed on sample 741344..

TEST REPORT: 4787692475.1

Issued on:: 8/2/2017

Front Stability ANSI/BIFMA X5.1:2011 Par. 12.4



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

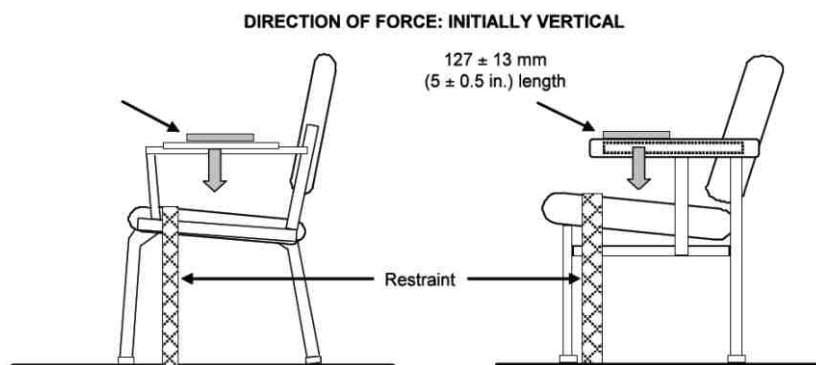
Load seat (N)	Loading point (mm)	Horizontal force (N)	Rating
600	60	20	P

Note: third test performed on sample 741344.

TEST REPORT: 4787692475.1

Issued on:: 8/2/2017

Arm Strength Test - Vertical – Static ANSI/BIFMA X5.1:2011 Par. 13



Adjustment devices have been set on the normal condition

Distance from the backrest to the arm: 300 mm

Functional Load			
Vertical load (N)	Time of test (sec)	N° cycle	Rating
750	60	1	P

Note: fourth test performed on sample 741342.

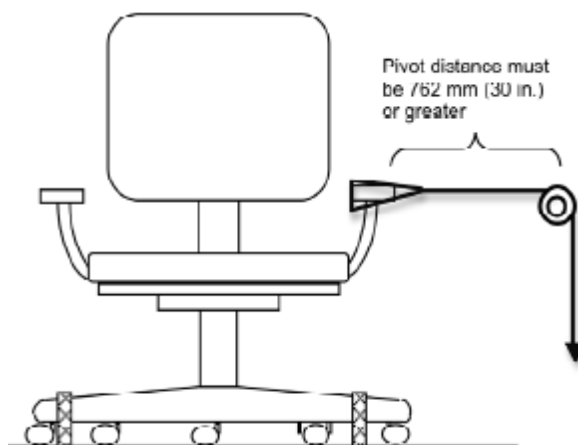
Proof Load			
Vertical load (N)	Time of test (sec)	N° cycle	Rating
1.125	60	1	P

Note: fourth test performed on sample 741342.

TEST REPORT: 4787692475.1

Issued on:: 8/2/2017

Arm Strength Test - Horizontal – Static ANSI/BIFMA X5.1:2011 Par. 14



Adjustment devices have been set on the normal condition

Distance from the backrest to the arm: 300 mm

Width of the belt used: 25 mm

Functional Load			
Vertical load (N)	Time of test (sec)	N° cycle	Rating
445	60	1	P

Note: fifth test performed on sample 741342.

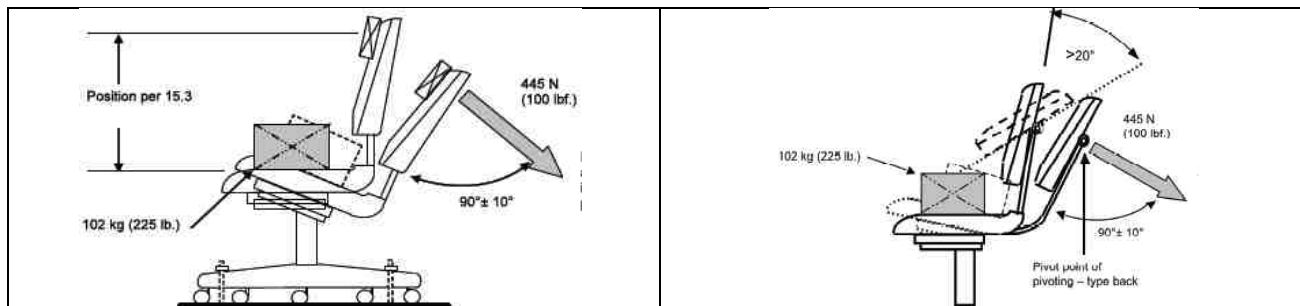
Proof Load			
Vertical load (N)	Time of test (sec)	N° cycle	Rating
667	60	1	P

Note: fifth test performed on sample 741342.

TEST REPORT: 4787692475.1

Issued on:: 8/2/2017

Backrest Durability Test - Cyclic - Type I ANSI/BIFMA X5.1:2011 Par. 15



Test has been performed pushing the backrest backwards

Backrest height: 650 mm

Loading pad height measured from the seat: 406 mm

Adjustment devices have been set on the normal condition

Frequency: 15 cycles per minute

Width of the backrest: 490 mm

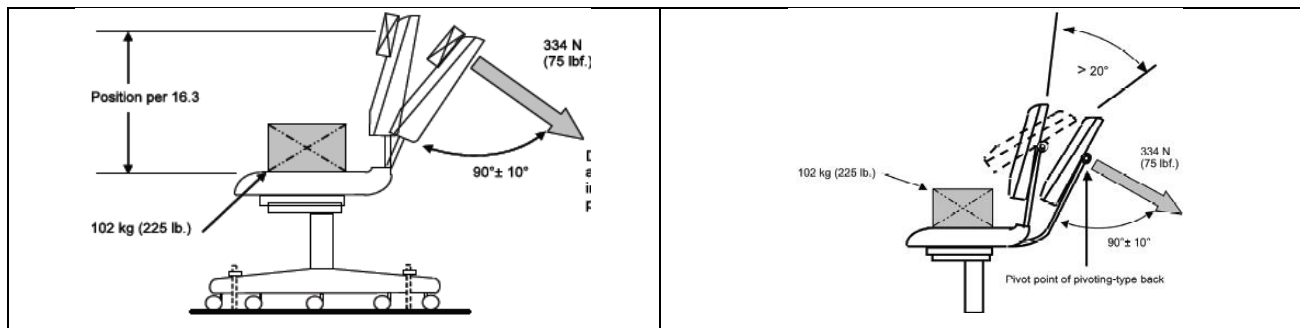
Width of the backrest > 406 mm				
Loading point on backrest	Load (kg)	Backrest force (N)	N° cycle	Rating
Centrally	102	445	80.000	P
102 mm to the right of the vertical centerline.	102	445	20.000	P
102 mm to the left of the vertical centerline.	102	445	20.000	P

Note: sample tested 666210; first test performed on sample – first step.

TEST REPORT: 4787692475.1

Issued on:: 8/2/2017

Backrest Durability Test - Cyclic - Type II and III ANSI/BIFMA X5.1:2011 Par. 16



Test has been performed pushing the backrest backwards

Backrest height: 650 mm

Loading pad height measured from the seat: 406 mm

Adjustment devices have been set on the normal condition

Frequency: 15 cycles per minute

Width of the backrest: 490 mm

Width of the backrest > 406 mm				
Loading point on backrest	Load (kg)	Backrest force (N)	N° cycle	Rating
Centrally	102	334	80.000	P
102 mm to the right of the vertical centerline.	102	334	20.000	P
102 mm to the left of the vertical centerline.	102	334	20.000	P

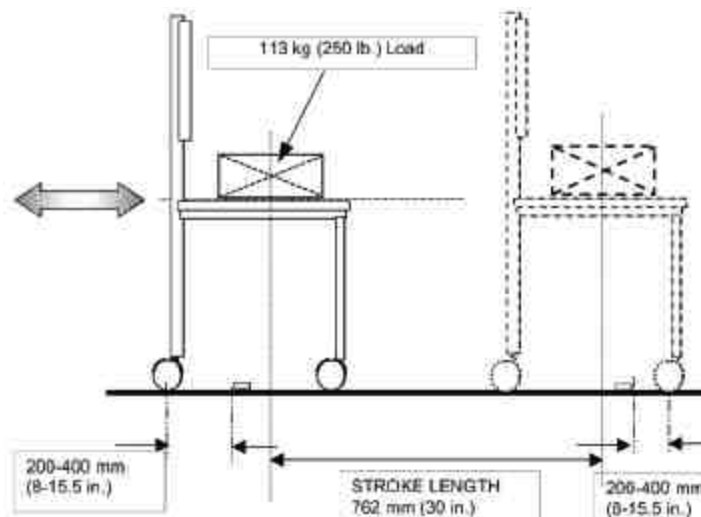
Note: sample tested 666210; first test performed on sample – second step.

TEST REPORT: 4787692475.1

Issued on:: 8/2/2017

Caster/Chair Base Durability Test – Cyclic ANSI/BIFMA X5.1:2011 Par. 17

Caster/Chair Frame Durability Test for Chairs with Legs ANSI/BIFMA X5.1:2011 Par. 17.2



The load test has been applied and maintained on the sample
Distance traveled by the sample in each direction per cycle: 762 mm

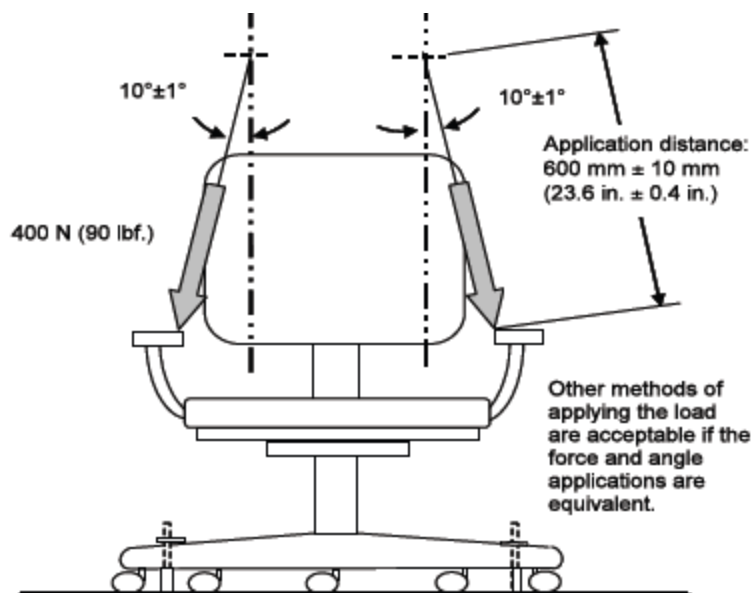
Step	Load (kg)	Frequency (cycle / minute)	N° cycle	Extraction force applied to the wheels (N)	Rating
With obstacles	113	9	2.000	22	P
Without obstacles		9	98.000		

Note: fourth test performed on sample 741342. F>247N

TEST REPORT: 4787692475.1

Issued on:: 8/2/2017

Arm Durability Test - Cyclic ANSI/BIFMA X5.1:2011 Par. 21



The armrests have been adjusted in the most unfavorable condition:

Minimum chairs and back height,

The arms have been adjusted to the highest position,

The arms have been adjusted to their width position

Distance between the inner edge of the armrest and the loading point: 20 mm

Angle inclination of force: 10° +/- 1°

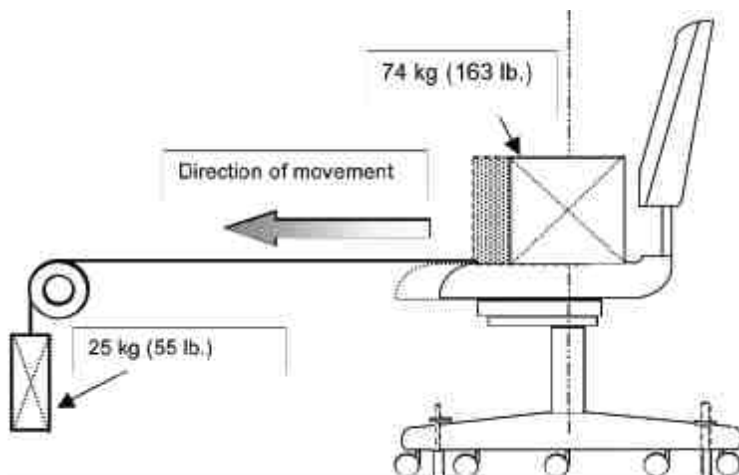
Load (N)	N° cycle	Frequency (cycle per minute)	Rating
400	60.000	14	P

Note: third test performed on sample 741342.

TEST REPORT: 4787692475.1

Issued on:: 8/2/2017

Out Stop Tests for Chairs with Manually Adjustable Seat Depth ANSI/BIFMA X5.1:2011 Par. 22



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

Weight (kg)	Load on Seat (kg)	N° cycle	Rating
25	74	25	P

Note: second test performed on sample 741344.

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