

TEST REPORT: 4789706755.1 Rev.1

This report cancels and replace the previous N° 4789706755.2 issued on 24/11/2020

APPLICANT

Name: Brado SpA
Address: Via Cal di Mezzo, 3
Bigolino di Valdobbiadene, TV
31049
Italy

Product: ORIA MESH K274/B2 - Ansi Bifma X5.1



DATE

Sample in: 2/11/2020
Tests start: 2/11/2020
Tests end: 23/11/2020
Report issue: 4/12/2020

OVERALL DIMENSIONS:

Measured:	Depth:	655 mm;	Height:	1120 mm
	Width:	665 mm	Weight:	16,8 kg
Nominal:	Depth:	ND;	Height:	ND;
	Width:	ND;	Weight:	ND;

Sample number 3427689
3427689-1 **Order Number:** 13575230

REFERENCE STANDARD

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

NOTE: On customer's request only the test listed in this report have been performed.

Sample defects before the test: NO VISIBLE DEFECTS

Tests have been performed at a temperature of 21 ± 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: I

Technician
Rodolfo Sala

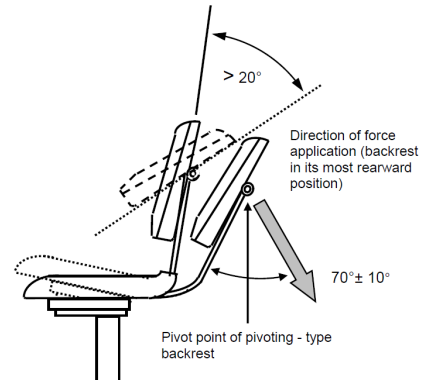
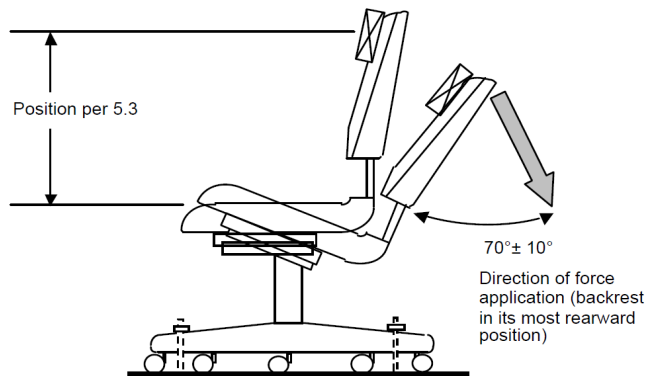
Laboratory Manager
Matteo Longoni

*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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Backrest Strength Test - Static - Type I and II ANSI/BIFMA X5.1:2017 Par. 5



Test has been performed pushing the backrest backwards

Backrest height: 630 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 force application (sec)	N° cycles	Rating
667	60	1	P

Note: Test performed on sample 1 as 1st test on this sample.

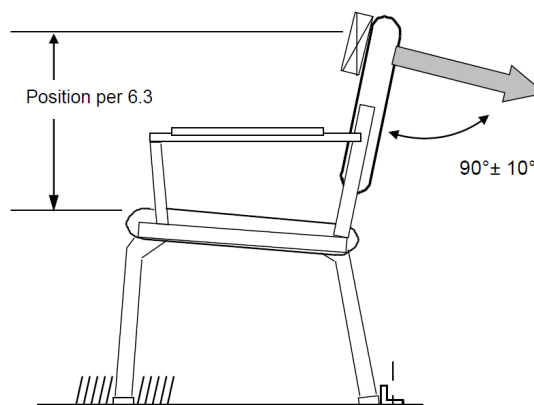
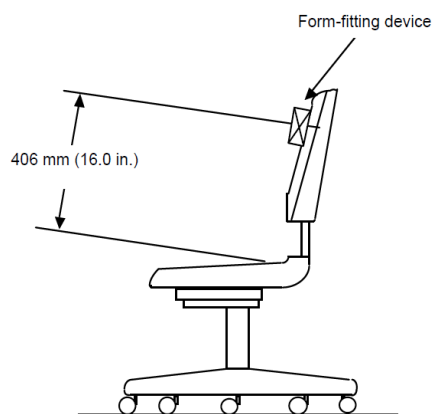
Proof Load			
Backrest force (N)	Time of force application (sec)	N° cycles	Rating
1001	60	1	P

Note: Test performed on sample 1 as 2nd test on this sample.

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Backrest Strength Test - Static - Type III ANSI/BIFMA X5.1:2017 Par. 6



Test has been performed pushing the backrest backwards

Backrest height: 630 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 force application (sec)	N° cycles	Rating
667	60	1	P

Note: Test performed on sample 2 as 1st test on this sample.

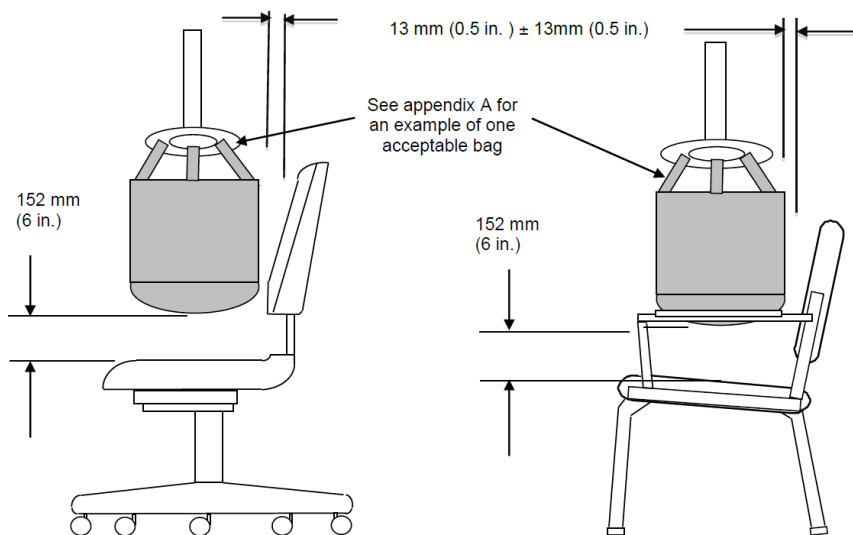
Proof Load			
Backrest force (N)	Time of force application (sec)	N° cycles	Rating
1001	60	1	P

Note: Test performed on sample 2 as 2nd test on this sample.

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



Adjustment devices have been set on the normal condition

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

Note: Test performed on sample 1 as 3rd test on this sample.

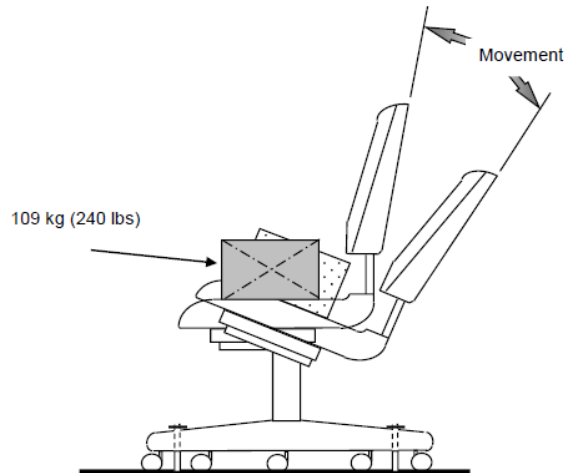
Proof Load					
Seat	The distance between the bag and the backrest	Drop height (mm)	Weight of bag (kg)	N° cycles	Rating
Highest position	13 mm	152	136	1	P
Lowest Position	13 mm	152	136	1	P
Fixed position	13 mm	152	136	1	NA

Note: Test performed on sample 1 as 4th test on this sample.

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Tilt Mechanism Test – Cyclic ANSI/BIFMA X5.1:2017 Par. 9



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 seat 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° cycles	Frequency (cycles per minute)	Rating
109	300.000	10	P

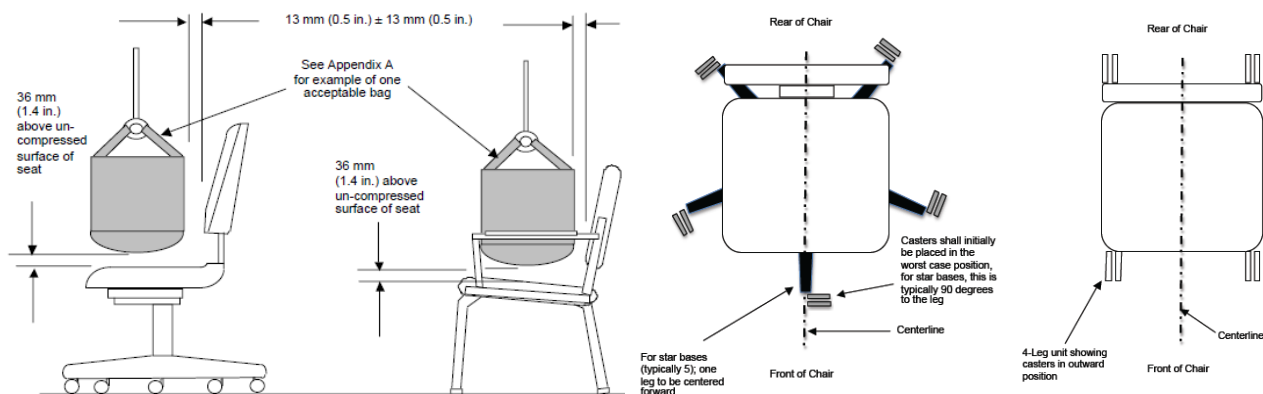
Note: Test performed on sample 2 as 3rd test on this sample.

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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



Adjustment devices have been set on the normal condition

Minimum thickness of cushiony materials of seat: <50 mm

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

Distance between the bag and the backrest: 13 mm

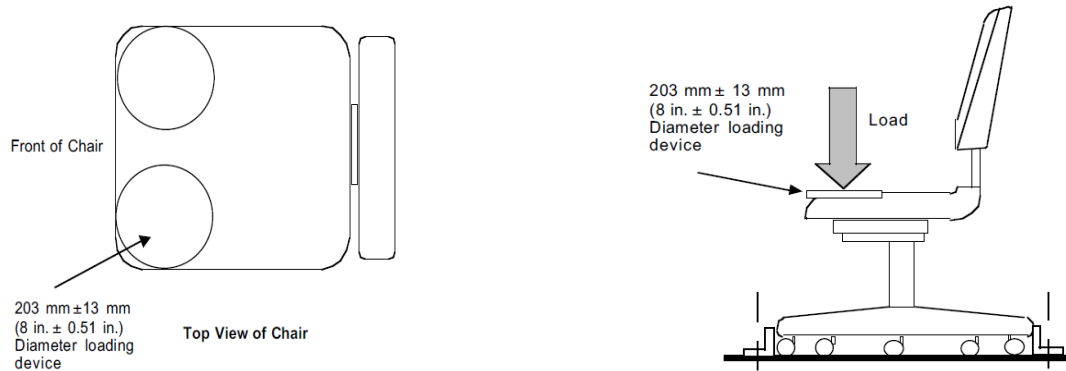
Weight of bag (kg)	Height of fall (mm)	N° cycles	Frequency (cycles / minute)	Rating
57	36 mm	100.000	10	P

Note: Test performed on sample 1 as 5th test on this sample.

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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)

Adjustment devices have been set on the normal condition

Seating load (N)	N° cycles	Frequency (cycles / minute)	Rating
890	40.000	15	P

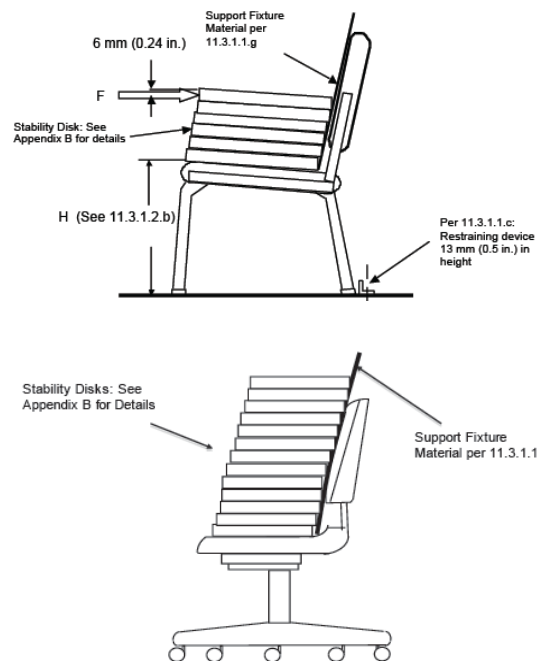
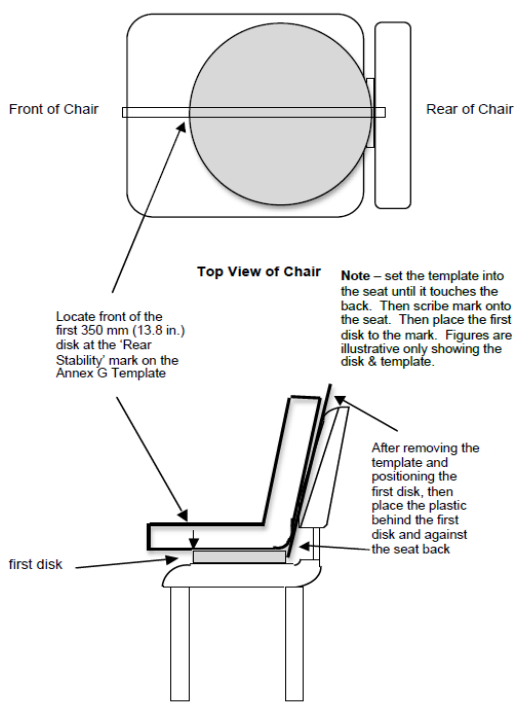
Note: Test performed on sample 1 as 6th test on this sample.

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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:
 maximum height of seat or backrest, or both,
 rearmost seat or backrest position, or both,
 the least stable condition of casters or glides and tilt mechanism.

Type III:

Applied discs on seat	Horizontal force (N)		Loading point	Rating
6	127		Top of backrest	P

Note: The horizontal force was determined by the following formula: $F = 0,1964 (1195 - H)$, when H found is: 550 mm. Tested with backrest locked

Type I:

Applied discs on seat	Rating
13	P

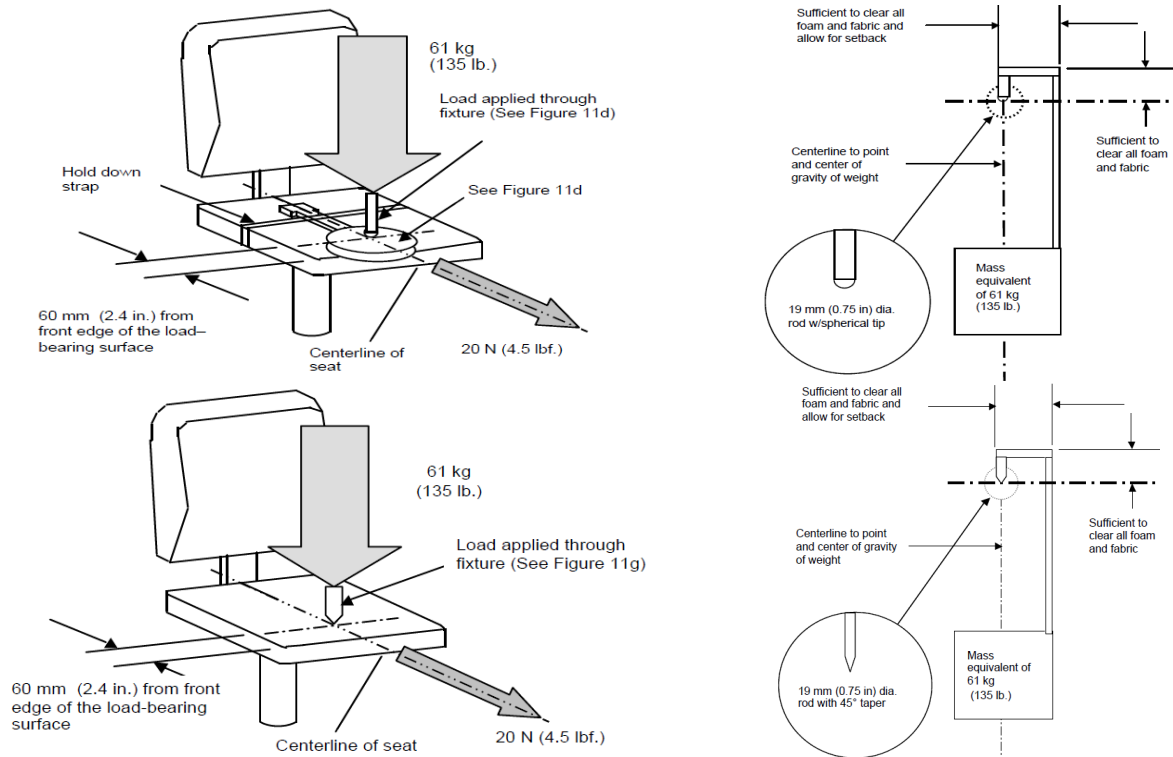
Note: Tested with backrest un-locked

Tests performed on sample 2 as 4th test on this sample.

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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:
maximum height of seat or backrest, or both,
rearmost seat or backrest position, or both,
the least stable condition of casters or glides or tilt mechanism.

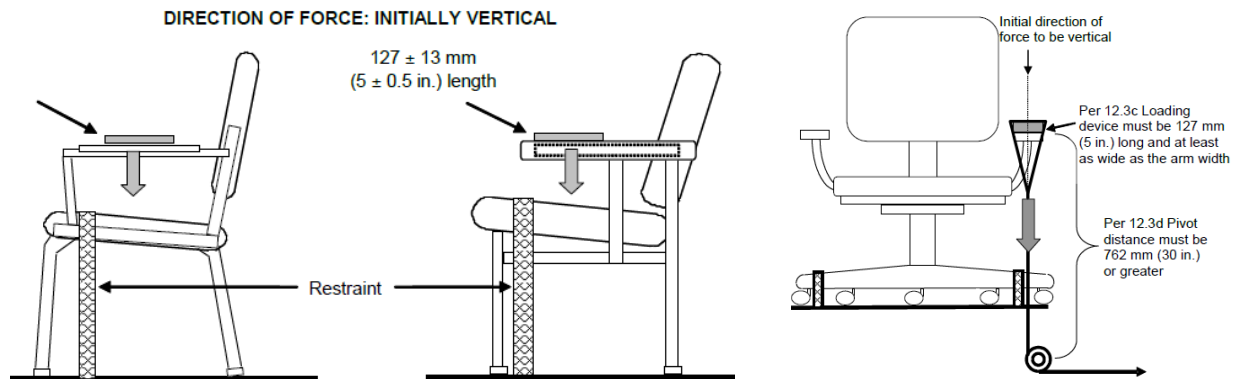
Load seat (kg)	Loading point (mm)	Horizontal force (N)	Rating
61	60	20	P

Note: Test performed on sample 2 as 5th test on this sample.

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Arm Strength Test - Vertical – Static ANSI/BIFMA X5.1:2017 Par. 12



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 force application (sec)	N° cycles	Rating
750	60	1	P

Note: Test performed on sample 1 as 7th test on this sample.

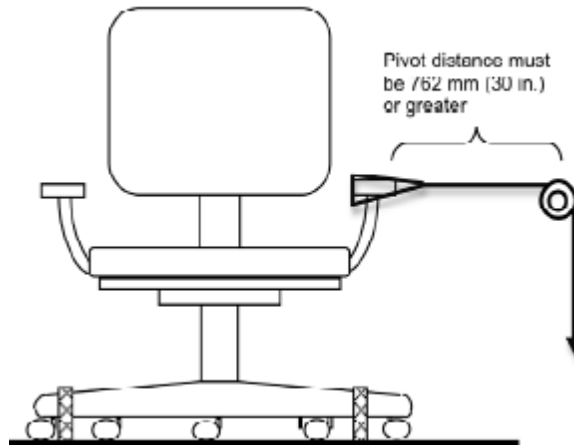
Proof Load			
Vertical load (N)	Time of force application (sec)	N° cycles	Rating
1125	60	1	P

Note: Test performed on sample 1 as 8th test on this sample.

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Arm Strength Test - Horizontal – Static ANSI/BIFMA X5.1:2017 Par. 13



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 force application (sec)	N° cycles	Rating
445	60	1	P

Note: Test performed on sample 1 as 9th test on this sample.

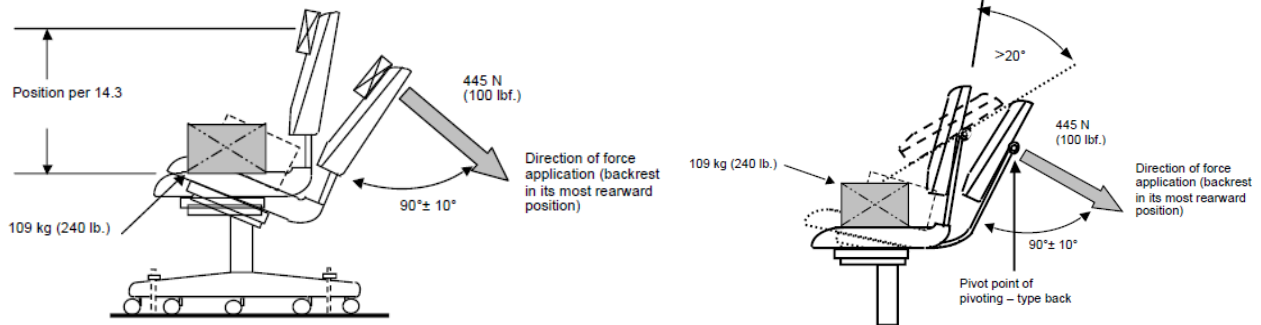
Proof Load			
Vertical load (N)	Time of force application (sec)	N° cycles	Rating
667	60	1	P

Note: Test performed on sample 1 as 10th test on this sample.

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Backrest Durability Test - Cyclic - Type I ANSI/BIFMA X5.1:2017 Par. 14



Test has been performed pushing the backrest backwards

Backrest height: 630 mm

Loading pad height measured from the seat: 406 mm

Adjustment devices have been set on the normal condition

Frequency: 10 cycles per minute

Width of the backrest: 410 mm

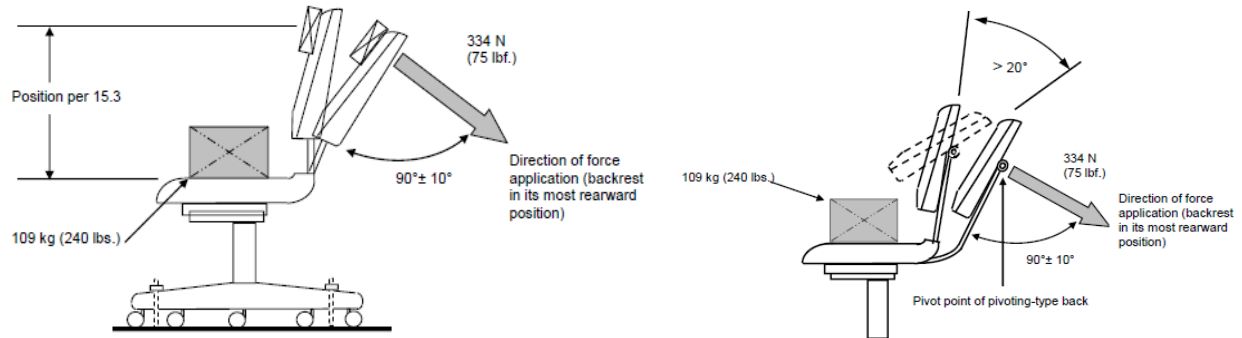
Width of the backrest ≤ 406 mm			
Load (kg)	Backrest force (N)	N° cycles	Rating
109	445	120.000	P

Note: Test performed on sample 1 as 11th test on this sample.

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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: 630 mm

Loading pad height measured from the seat: 406 mm

Adjustment devices have been set on the normal condition

Frequency: 10 cycles per minute

Width of the backrest: 400 mm

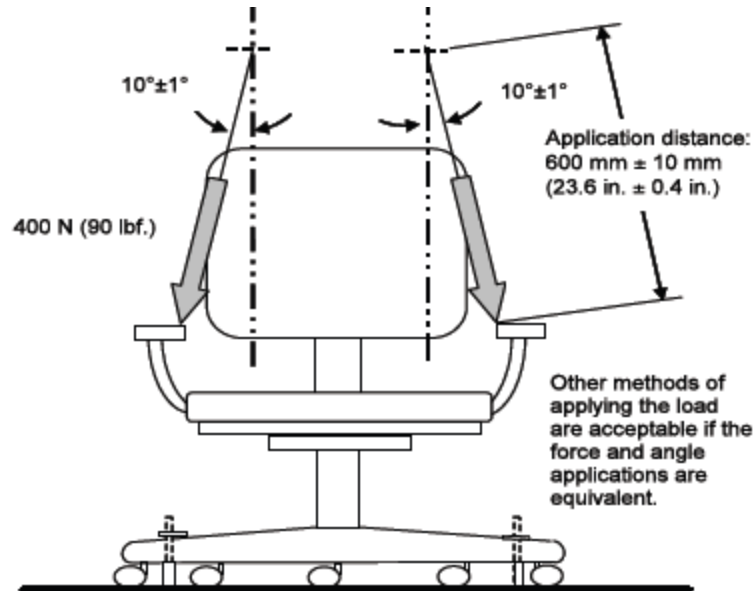
Width of the backrest ≤ 406 mm			
Load (kg)	Backrest force (N)	N° cycles	Rating
109	334	120.000	P

Note: Test performed on sample 2 as 6th test on this sample.

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Arm Durability Test - Cyclic ANSI/BIFMA X5.1:2017 Par. 20



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 max width position.

Distance between the inner edge of the armrest and the loading point: 100 mm

Angle inclination of force: 10 °

Load (N)	N° cycles	Frequency (cycles per minute)	Rating
400	60.000	15	P

Note: Test performed on sample 1 as 12th 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 test IS NOT APPLICABLE to the sample.
- NR** = NOT quest 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