

Test Report

Report No.: 986087-1



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No. of appendices: 2

Item: Model: Rey Bar Stool

Type:	Chair				
Length:	450 mm	Width:	500 mm	Height:	980 mm
Weight:	7.16 kg				
Materials:	Beech, metal				

Sampling: The test material was sampled by the client and received at the Danish Technological Institute 18-06-2021.

Method: ANSI/BIFMA X5.1-2017 American National Standard For Office Furnishings - **General Purpose Office Chairs - Tests**

Period: The testing was carried out from 21-06-2021 to 02-09-2021.

Result: Model Rey Bar Stool fulfils the requirements of ANSI/BIFMA X5.1-2017, Type III.
Individual results appear from Appendix 1.

Storage: The test material will be destroyed after 1 month, unless otherwise agreed.

Terms: Accredited testing was carried out in compliance with international requirements (EN/ISO/IEC 17025:2005) and in compliance with Danish Technological Institute's General Terms and Conditions regarding Commissioned Work accepted by Danish Technological Institute. The test results apply to the tested products only. This report may be quoted in extract only if the laboratory has granted its written consent.

Date/place: 02-09-2021, Danish Technological Institute, Wood and Biomaterials, Taastrup

Signature: Test responsible

Co-signatory



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ANSI/BIFMA X5.1-2017 – Type III

Test		Result
5.	Backrest strength test – static – Type I and II	
	Functional load: 667 N x 1 min. Proof load: 1001 N x 1 min.	N/A
6.	Backrest strength test – static – Type III (backrest height: >200 mm)	
	Functional load: 667 N x 1 min. Proof load: 1001 N x 1 min.	Passed
7.	Drop test – dynamic	
	Proof load: 136 kg impact test bag – drop from 152 mm	Passed
8.	Swivel test – cyclic	
	Seat constant load: 122 kg 90° rotation x 120.000 cycles	N/A
9.	Tilt mechanism test – cyclic (Type I and II chairs)	
	Seat constant load: 109 kg Back tilt: 300.000 cycles	N/A
10.	Seating durability test – cyclic + Front corner load-ease test - cyclic	
	1: Impact test back: 57 kg x 100,000 cycles (Constant weight in seat(s) not being tested: 109 kg) 2: 890N at each corner of seat front x 40.000 cycles	Passed
11.	Stability tests	
	Rear stability: 6 discs (non-tilting unit / Type III) 13 discs (tilting unit / Type I and II) Force on back: $F = 0.1964 (1195-H)$ (H = seat height in mm) Front stability: Seat load: 61 kg – horizontal pull force: 20 N	Passed
12.	Arm strength test – vertical – static	
	Functional load: 750 N x 1 min. Proof load: 1125 N x 15 sec.	N/A
13.	Arm strength test – horizontal - static	
	Functional load: 445 N x 1 min. – outward dir. Proof load: 667 N x 15 sec. – outward dir.	N/A
14.	Backrest durability test – cyclic – Type I	
	Seat constant load: 109 kg Force on back: 445 N x 120,000 cycles	N/A
15.	Backrest durability test – cyclic – Type II and III	
	Seat constant load: 109 kg Force on back: 334 N x 120,000 cycles	Passed
16.	Caster/chair base durability test – cyclic	
	Seat constant load: 122 kg On surface with obstacles: 2000 cycles On surface without obstacles: 25.000 cycles Pull force on caster: 22 N	N/A
17	Leg strength test – front and side application	
	Functional load: 334 N x 1 min. Proof load: 503 N x 1 min.	Passed

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Test		Result
18.	Footrest static load test – vertical (Seat height \geq 610 mm)	
	Functional load: 445 N – 890 N x 1 min (in two opposite directions) Proof load: 1334 N x 10 sec.	Passed
19.	Footrest durability test – vertical – cyclic (Seat height \geq 610 mm)	
	Force on footrest: 890 N x 50,000 cycles	Passed
20.	Arm durability test – cyclic	
	Force on (each) arm: 400 N x 60,000 cycles	N/A
21.	Out stop test for chairs with manually adjustable seat depth	
	Seat constant load: 74 kg Drop load: 25 kg x 25 cycles	N/A
22.	Tablet arm chair static load test	
	Downward force: 68 kg x 1 min.	N/A
23.	Tablet arm chair load ease test – cyclic	
	Downward force: 25 kg x 100,000 cycles	N/A
24.	Structural durability test – cyclic	
	Seat constant load: 109 kg Push/pull force: 334 N x 25,000 cycles	N/A

N/A – Not applicable

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Testing of Model: Ray Bar Stool

Photo

