

Test Report

Report No.: 118115-4



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Jjoh/jha/hbs
Order no.: 118115
No. of appendices: 3

Item: Model: Student Chair

Type:	Chair				
Length:	590 mm	Width:	590 mm	Height:	1035 mm
Weight:	7.48 kg				
Materials:	Plastic, metal				

Sampling: The test material was sampled by the client and received at the Danish Technological Institute 17-01-2022.

Method: **EN 1729-1:2015/AC:2016** Furniture – Chairs and tables for educational institutions - Part 1: Functional dimensions. Measured according to table D.1.

EN 1729-2:2012+A1:2015 Furniture – Chairs and tables for educational institutions - Part 2: Safety requirements and test methods. Loading according to EN 1729-2:2012+A1:2015 highest level.

Period: The testing was carried out from 18-01-2022 to 23-02-2022.

Result: Model Student Chair fulfils the requirements in EN 1729-1:2015/AC:2016, Table D.1 and the requirements in EN 1729-2:2012+A1:2015.

It fulfils the requirements of size marks 5 and 6.

Individual results appear from Appendices 1 and 2.

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: 23-02-2022, Danish Technological Institute, Wood and Biomaterials, Taastrup

Signature: Test responsible

Co-signatory



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Testing of Model: Student Chair

EN 1729-1:2015/AC:2016 – Table D.1 – Chair

Size mark	0	1	2	3	4	5	6	7
Colour code	White	Orange	Violet	Yellow	Red	Green	Blue	Brown
Popliteal range (without shoes)	200-250	250-280	280-315	315-355	355-405	405-435	435-485	485+
Stature range (without shoes)	800-950	930-1160	1080-1210	1190-1420	1330-1590	1460-1765	1590-1880	1740-2070
h₈ Seat height ± 10	210	260	310	350	380	430	460	510
Measured							450	
t₄ Effective seat depth ± 15 mm (0-2) ± 25 mm (3-7)	-	-	-	300	340	380	420	460
Measured						400	400	
b₃ Seat width	210	240	280	320	340	360	380	400
Measured						420	420	
x Distance between Point S and back of seat pad (max.)	-	-	-	30	30	50	50	50
Measured						N/A	N/A	
h₇ Backrest height (min.)	100	100	100	100	100	100	100	100
Measured						220	220	
b₄- Width of backrest (min.)	-	-	-	260	270	300	330	360
Measured						395	395	
r₂ Horizontal radius of backrest (min.)	-	-	-	300	300	300	300	300
Measured						>300	>300	
α Inclination of seat	-	-	-	-5° to +7°	-5° to +7°	-5° to +7°	-5° to +7°	-5° to +7°
Measured						+1.2°	+1.2°	
γ Angle between seat and backrest	-	-	-	95° to 110°	95° to 110°	95° to 110°	95° to 110°	95° to 110°
Measured						101.9°	101.9°	

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Testing of Model: Student Chair

Size mark	0	1	2	3	4	5	6	7
Colour code	White	Orange	Violet	Yellow	Red	Green	Blue	Brown
p Height of armrest above seat -20 to +10	-	-	-	170	190	210	230	250
Measured						N/A	N/A	
r Width between arms	-	-	-	360-410	390-440	420-470	460-510	510-570
Measured						N/A	N/A	
q Distance from backrest to front edge of armrest (max.)	-	-	-	-	225	250	275	300
Measured						N/A	N/A	
o Width of armrest (min.)	-	-	-	-	20	20	20	20
Measured						N/A	N/A	
n Length of armrest (min)	-	-	-	-	80	80	80	80
Measured						N/A	N/A	
Length of footrest (min.)	-	-	-	300	300	300	300	300
Measured						330	330	
Depth of footrest (min.)	-	-	-	50	50	50	50	50
Measured						✓	✓	

Table F.2 Point S Range for Size Mark

It fulfils the requirements of size marks 5 and 6

	Result
Buttock zone meets the requirement	Passed
Lumbar support	Passed

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Test of Model: Student Chair

Loading according to EN 1729-2:2012+A1:2015

Testing	Test Method	Cycles	Loading	Result
5 Testing of chairs				
5.2.2 Forward stability	EN 1022:2005 6.2 or 8.2		Seat: 600 N Horizontal: 20 N	Passed
5.2.3.1 Sideways stability for chairs without armrests	EN 1022:2005 6.4 or 8.2		Seat: 600 N Horizontal: 20 N	Passed
5.2.3.2 Sideways stability for chairs with armrests	EN 1022:2005 6.4, 8.2		Seat: 600 N Horizontal: 20 N	N/A
5.2.4 Rearwards stability	EN 1022:2005 6.6 or 8.5		Seat: 600 N Back: 180 N	Passed
5.2.5 Chairs with backrest inclination	EN 1335-3:2009, 7.17			N/A
5.3.2 Seat and back static load	EN 1728:2012, 6.4	10	Seat: 2000 N Back: Max 700 N	Passed
5.3.3 Seat and back durability	EN 1728:2012 6.17	100.000	Seat: 1250 N Back: 300 N	Passed
5.3.4 Seat front edge durability	EN 1728:2012 6.18	50.000	Vertical: 800 N	Passed
5.3.5 Sideways static load	EN 1728:2012 6.16	10	Vertical: Max. 1600 N Horizontal: Max 600 N	Passed
5.3.6 Forward static load	EN 1728:2012 6.15	10	Vertical: Max. 1600 N Horizontal: Max 600 N	Passed
5.3.7 Seat impact	EN 1728:2012 6.24	10	Drop height: Max. 300 mm	Passed
5.3.8 Back impact	EN 1728:2012 6.25	10	Drop height: Max. 620 mm	Passed
5.3.9 Static load of foot rail	EN 1728:2012 6.8	10	Vertical: max. 1300 N	Passed
5.3.10 Drop test	EN 1728-2:2012 6.27.3	5	Drop height: 600 mm	Passed
5.3.11 Foot rest durability	EN 1728-2:2012, 6.21	50.000	Max. 1000 N	Passed
5.3.12 Armrest, vertical static load	EN 1728-2:2012, 6.11 or EN 1335-3:2009, 7.2.3 or EN 1728:2012, 6.11	50.000	Max. 1000 N	N/A
5. Marking	EN 1729-1:2015			N/A
6. Instructions	EN 1729-1:2015			N/A

N/A – Not applicable

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Photo

