



**DANISH
TECHNOLOGICAL
INSTITUTE**

Gregersensvej
DK-2630 Taastrup
Tel. +45 72 20 20 00
Fax +45 72 20 20 19

info@teknologisk.dk
www.teknologisk.dk

Test Report

Report No.: 813734-8

Assignor: Four Design A/S
Faaborgvej 14
DK-5854 Gislev

Page 1 of 1
laha/ir/hbs
Order no.: 813734
No. of appendices: 2

Subject: Model: Four Bench ®160 also covers Four Bench ®120 and Four Bench ®100

Type:	Chair				
Length:	390 mm	Width:	1600 mm	Height:	475 mm
Weight:	11 kg				
Materials:	Metal, oak				

Sampling: The test material was sampled by the client and received at the Danish Technological Institute 13-02-2019.

Method: EN 1022:2005 Domestic furniture - Seating - Determination of stability.
EN 16139:2013 Furniture - Strength, durability and safety - Requirements for non-domestic seating.

Clauses 4.1, 4.2.3, 4.3.3, 5, 6.1.1, 6.1.2, 6.1.8, 6.1.9, 6.1.12, 6.1.13, 6.1.14, 6.1.15, 6.1.17.

L2: Extreme use: E.g. in night-clubs, police stations, transport terminals, sport changing rooms, prisons, barracks (non-controlled areas).

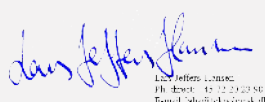
Period: The testing was carried out from 14-02-2019 to 08-03-2019.

Result: Model Four Bench ®160 fulfils the requirements in EN 1022:2005 and EN 16139:2013. Loading according to Test severity L2. 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 (DTI) 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: 11-03-2019, Danish Technological Institute, Wood and Biomaterials, Taastrup


Ib Steen Rasmussen
Ph. direct: +45 72 20 20 50
E-mail: ir@teknologisk.dk

Digitally signed by:
Ib Steen Rasmussen
Ph.-Direct: +45 72202324
E-mail: ir@teknologisk.dk

Signature: Test responsible

Co-signatory



Order no.: 813734-8
Appendix: 1
Page: 1 of 1
Initials: laha/ir/hbs

Test of Model: Four Bench ®160

Loading according to Test severity L2.

Test	Test Method	Cycles	Load	Result
4.1 General	EN 16139, 4.1			Passed
4.2.2 Shear and squeeze points under influence of powered mechanisms	EN 16139, 4.2.2			N/A
4.2.3 Shear and squeeze points during use	EN 16139, 4.2.3			Passed
4.3.2 Swivelling chairs	EN 1022			N/A
4.3.3 Non swivelling chairs	EN 1022			Passed
4.4 Rolling resistance of the unloaded chair	EN 16139, 4.4			N/A
5 Strength and durability requirements	EN 16139, 5			Passed
6.1.1 Seat static load and back static load test	EN 1728:2012, 6.4	10 10	Seat: 2000 N Back: 700 N	Passed
6.1.2 Seat front edge static load	EN 1728:2012, 6.5	10	Seat: 1600 N	Passed
6.1.3 Vertical load on back rests	EN 1728:2012, 6.6			N/A
6.1.4 Foot rest static load test	EN 1728:2012, 6.8			N/A
6.1.4 Leg rest static load test	EN 1728:2012, 6.9			N/A
6.1.5 Arm rest sideways static load test	EN 1728:2012, 6.10			N/A
6.1.6 Arm rest downwards static load test	EN 1728:2012, 6.11			N/A
6.1.7 Vertical upwards static load on arm rests	EN 1728:2012, 6.13			N/A
6.1.8 Combined seat and back durability test	EN 1728:2012, 6.17	200000 200000	Seat: 1000 N Back: 300 N	Passed
6.1.9 Seat front edge durability test	EN 1728:2012, 6.18	100000	800 N	Passed
6.1.10 Arm rest durability test	EN 1728:2012, 6.20			N/A
6.1.11 Foot rest durability test	EN 1728:2012, 6.21			N/A
6.1.12 Leg forward static load test	EN 1728:2012, 6.15	10	Edge: 620 N) (Seat: 1800 N)	Passed
6.1.13 Legs sideways static load test	EN 1728:2012, 6.16	10	Edge: 760 N) (Seat: 1800 N)	Passed
6.1.14 Seat impact test	EN 1728:2012, 6.24	10	300 mm	Passed
6.1.15 Back impact test	EN 1728:2012, 6.25	10	330 mm / 48°	Passed
6.1.16 Arm Impact Test	EN 1728:2012, 6.26			N/A
6.1.17 Drop test (multiple seating)	EN 1728:2012, 6.27.1			Passed
6.1.18 Auxiliary writing surface static load test	EN 1728:2012, 6.14			N/A
6.1.19 Auxiliary writing surface durability test	EN 1728:2012, 6.22			N/A
7 Information for use	EN 16139, 7			N/A

Order no.: 813734-8
Appendix: 2
Page: 1 of 1
Initials: laha/ir/hbs

Test of Model: Four Bench ®160

Photo

