Test Report

Report Number:
257631-7

DANISH
TECHNOLOGICAL
INSTITUTE

Gregersensvej 1
DK-2630 Taastrup
+45 72 20 20 00
info@teknologisk.dk
www.teknologisk.dk

Assignor:	HAY APS, Havnen 3, DK-8700 Horsens
Item :	**Layout 214** - The test also covers **Layout 211**, **Layout 212**, **Layout 213**
Sampling:	The assignor confirms having selected the product. The product was forwarded by the assignor and received at Danish Technological Institute on 3 February 2025.
Period:	The test took place from 17 February 2025 to 17 March 2025.
Method:	EN 16139:2013, Furniture - Strength, durability and safety - Requirements for non domestic seating EN 16139 Test severity L2: Extreme use: E.g. in night-clubs, police stations, transport terminals, sport changing rooms, prisons, barracks (non-controlled areas). Additional information is given in enclosure B.
Test results:	**Passed.** The results are shown in enclosure A.
Terms:	This test was conducted accredited in accordance with international requirements (ISO/IEC 17025:2017) and in accordance with the General Terms and Conditions of Danish Technological Institute. The test results solely apply to the tested item. This test report may be quoted in extract only if Danish Technological Institute has granted its written consent.
Place:	Danish Technological Institute, Taastrup, Building and Construction
Signature:	This document is only valid with a digital signature from Danish Technological Institute. Date of issue 17 March 2025. Jan Hansen Technical consultant

DIGITALLY SIGNED DOCUMENT
19 March 2025
DANISH TECHNOLOGICAL INSTITUTE

ilac-MRA DANAK
TEST Reg.no. 2

DANISH TECHNOLOGICAL INSTITUTE

Test of Model: Layout 214

Loading according to test severity L2.

Test no.	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 1335			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	Safety, strength and durability requirements	EN 16139, 5			Passed
6.1.1	Seat static load and back static load test	EN 1728, 6.4	10 10	Seat: 2000 N Back: 700 N	Passed
6.1.2	Seat front edge static load	EN 1728, 6.5	10	Seat: 1600 N	Passed
6.1.3	Vertical load on back rests	EN 1728, 6.6	10	Seat: 1800 N Back: 900 N	Passed
6.1.4	Foot rest static load test	EN 1728, 6.8	10		N/A
6.1.4	Leg rest static load test	EN 1728, 6.9	10		N/A
6.1.5	Arm rest sideways static load test	EN 1728, 6.10	10	900 N	Passed
6.1.6	Arm rest downwards static load test	EN 1728, 6.11	5	900 N	Passed
6.1.7	Vertical upwards static load on arm rests	EN 1728, 6.13	10		N/A
6.1.8	Combined seat and back durability test	EN 1728, 6.17	200000 200000	Seat: 1000 N Back: 300 N	Passed
6.1.9	Seat front edge durability test	EN 1728, 6.18	100000	800 N	Passed
6.1.10	Arm rest durability test	EN 1728, 6.20	60000	400 N	Passed
6.1.11	Foot rest durability test	EN 1728, 6.21	100000		N/A
6.1.12	Leg forward static load test	EN 1728, 6.15	10	Edge: 620 N (Seat: 1800 N)	Passed
6.1.13	Legs sideways static load test	EN 1728, 6.16	10	Edge: 500 N (Seat: 1800 N)	Passed
Comment	The loading was reduced from 760N to 500N to avoid tilting.				
6.1.14	Seat impact test	EN 1728, 6.24	10	300 mm	Passed
6.1.15	Back impact test	EN 1728, 6.25	10	330 mm / 48 °	Passed
6.1.16	Arm Impact Test	EN 1728, 6.26	10	330 mm / 48 °	Passed
6.1.17	Drop test (multiple seating)	EN 1728, 6.27.1	2 x 5		N/A
6.1.18	Auxiliary writing surface static load test	EN 1728, 6.14			N/A
6.1.19	Auxiliary writing surface durability test	EN 1728, 6.22	20000		N/A
7	Information for use	EN 16139, 7			Passed

DANISH TECHNOLOGICAL INSTITUTE

Information required by EN 16139:2013

European Standards used:

EN 16139:2013 - Furniture - Strength, durability and safety - Requirements for non-domestic seating

EN 1728/AC:2012 - Domestic furniture - Seating - Test methods - Determination of strength and durability

EN 1022:2005 - Domestic furniture - Seating - Determination of stability

EN 1335:2009 - Office furniture - Office work chair - Part 3: Test methods

Measurement uncertainty:

Decision rule according to EN ISO IEC 17025:2018 clause 3.7: No account is taken of measurement uncertainty when reporting numerical results.

Details of tested seating:

Model:	**Layout 214**			**Type:**	Chair		
Length:	610 mm	**Depth:**	560 mm	**Height:**	795 mm	**Weight:**	8.96 kg
Materials:	Metal, foam upholstery						

Details of defects observed before testing:

None.

Details of any deviations from this standard:

None.

Any variation from the specified temperature range:

None.

Test result:

See appendix A.

Name and address of the test facility:

Danish Technological Institute, Gregersensvej, Taastrup 2630, Denmark

Date of test:

2025-02-17 to 2025-03-17

Storage:

The test material will be destroyed 1 month after the test is completed, unless otherwise agreed in writing.

Photo of the received sample:

