

Götessons Industri AB
Box 56
523 22 ULRICEHAMN
SWEDEN

Testing of seating furniture according to FprEN 16139:2024

(3 appendices)

Customer:	Götessons Industri AB
Test object/ID:	Modular seating/647608 – Sandy backrest
Test method:	FprEN 16139:2024 Furniture - Strength, durability and safety - Requirements for non-domestic seating. Test level 1
Scope:	Limited test to stability and strength of seat and back
Date of test:	2025-03-18 – 2025-04-10
Test result:	The tested object passed the test
Reservation:	The test results in this report apply solely to the specimen tested
Test environment:	23 ± 2°C and 50 ± 5% relative humidity
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
Additional information:	The test method and results also comply with EN 16139:2013

RISE Research Institutes of Sweden AB Department Building and Real Estate - Technical Wood Assessment

Performed by

Lukas Andersson

Lukas Andersson

Examined by

Bengt-Åke Andersson

Bengt-Åke Andersson

Appendices

1. Test result (3 pages)
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3. Pictures (2 pages)

RISE Research Institutes of Sweden AB

Postal address
Box 857
501 15 BORÅS
SWEDENOffice location
Brinellgatan 4
504 62 Borås
SWEDENPhone / Fax / E-mail
+46 10-516 50 00
+46 33-13 55 02
info@ri.seThis report may not be reproduced other than in full, except
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Testing
ISO/IEC 17025

Appendix 1

Test result

Abbreviations: N/A = Not applicable
N/T = Not tested

Table 1

1.	Safety	FprEN 16139	Result
1.1	<p><u>General requirements</u></p> <p>The seating shall be so designed as to minimise the risk of injury to the user.</p> <p>All accessible parts shall be so designed that physical injury and damage are avoided.</p> <p>This requirement is met when:</p> <ul style="list-style-type: none"> a) accessible corners are rounded or chamfered; b) the edges of the seat, back rest and arm rests which are in contact with the user when sitting in the chair are rounded or chamfered; c) the edges of handles are rounded or chamfered in the direction of the force applied; d) all other edges are free from burrs and rounded or chamfered; e) the ends of hollow components are closed or capped. <p>Movable and adjustable parts shall be designed so that injuries and inadvertent operation are avoided.</p> <p>It shall not be possible for any load bearing part of the seating to come loose unintentionally.</p> <p>All parts which are lubricated to assist sliding shall be designed to protect users from lubricant stains when in normal use</p>	4.1 4.2	Pass
1.2	<p><u>Shear and squeeze points</u></p> <p>With the exception of tipping seats there shall be no shear and squeeze points created by parts of the seating operated by powered mechanisms, e.g. springs and gas lifts.</p> <p>There shall be no shear and squeeze points created by forces applied during normal use as well as during normal movements and actions</p> <p>Note! Shear and squeeze points that are created only during manually setting up and folding are acceptable, because the user can be assumed to be in control of his/her movements and to be able to cease applying the force immediately upon experiencing pain.</p>	4.3	Pass

Appendix 1

Table 2

2.	Stability	EN 1022:2023	Result
2.1	Forwards overbalancing Requirement ≥ 20 N	7.3.1	Pass > 100 N
2.2	Forwards overturning for seating with footrest Requirement ≥ 20 N	7.3.2	N/A
2.3	Corner stability test Requirement 30 kg	7.3.3	N/A
2.4	Sideways overbalancing, all seating without arms Requirement ≥ 20 N	7.3.4	Pass > 100 N
2.5	Sideways overbalancing, all seating with arms Requirement ≥ 20 N	7.3.5.2	N/A
2.6	Sideways overbalancing, seating with raised side edges	7.3.5.3	N/A
2.7	Rearwards overbalancing, all seating with backs Requirement ≥ 166 N	7.3.6	Pass > 200 N

Table 3

3.	Strength, durability	Reference EN 1728	Cycles	FprEN 16139 level 1	Result
3.1	Seat and back static load test	6.4	10	Seat: 1600 N Back: 560 N	Pass
3.2	Seat front edge static load test	6.5	10	1300 N	Pass
3.3	Vertical static load on back rests	6.6	10	600 N Seat: 1300 N	Pass
3.4.1	Foot rest static load test	6.8	10	1300 N Seat: 750 N	N/A
3.4.2	Leg rest static load test	6.9	10	1300 N	N/A
3.5	Arm sideways static load test	6.10	10	400 N	N/A
3.6	Arm downwards static load test	6.11	5	750 N	N/A
3.7	Vertical upwards static load on arm rests for stackable seating	6.13.2	10	25 kg	N/A

Appendix 1

3.	Strength, durability	Reference EN 1728	Cycles	FprEN 16139 level 1	Result
3.8	Seat and back durability test	6.17	100 000	Seat: 1000N Back: 300 N	Pass
3.9	Seat front edge durability test	6.18	50 000	800 N	N/T
3.10	Seat side-to-side durability test (For single column seat)	Annex B	10 000	1100 N	N/A
3.11	Arm durability test	6.20	30 000	400 N	N/A
3.12	Foot rest durability test	6.21	50 000	1000 N Seat: 1000 N	N/A
3.13	Leg rest durability test	Annex C	10 000	1000 N	N/A
3.14	Leg forward static load test	6.15	10	500 N Seat: 1000 N	N/A
3.15	Leg sideways static load test	6.16	10	400 N Seat: 1000 N	N/A
3.16	Seat impact test	6.24	10 x 2	240 mm	Pass
3.17	Backward fall test	6.28	5	Unloaded	N/A
3.18	Back impact test	6.25	10	210 mm/38°	Pass
3.19	Arm impact test	6.26	10	210 mm/38°	N/A
3.20	Auxiliary writing surface static load test	6.14	10	300 N	N/A
3.21	Auxiliary writing surface durability test	6.22	10 000	150 N	N/A

Appendix 2

Test object

Test object/ID: Modular seating/647608 – Sandy backrest

Dimensions¹

Width: 990 mm

Depth: 785 mm

Height: 820 mm

Seat height: 460 mm

Mass: 26.1 kg

Components

Frame/legs: Laminated particleboard

Seat: Flexible foam and fabric

Backrest: Flexible foam and fabric

Functions: Magnetic connections

Sampling: The test object was selected by the customer

Date of arrival at
RISE test laboratory: 2025-03-06

Observed defects before testing: No defects

¹ The dimensions are only intended to unambiguously identify the test object and do not claim to be metrologically accurate

Appendix 3

Pictures

Figure 1



Figure 2

Appendix 3

Pictures



Figure 3



Figure 4

Verification

Transaction 09222115557544297025

Document

1310644B Götessons Sandy backrest report

Main document

7 pages

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Signatories

Bengt-Åke Andersson (BA)

RISE Research Institutes of Sweden AB

Company reg. no. 556464-6874

bengt-ake.andersson@ri.se



Signed 2025-04-15 10:52:39 CEST (+0200)

Lukas Andersson (LA)

Research Institutes of Sweden AB

Company reg. no. 556464-6874

lukas.andersson@ri.se



Signed 2025-04-15 10:55:11 CEST (+0200)

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