

Bebo Objects AB  
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33573 HILLERSTORP  
SWEDEN

## Testing of seating furniture according to EN 581-1, -2

(3 appendices)

<b>Customer:</b>	Bebo Objects AB
<b>Test object/ID:</b>	Seating furniture/Lyre
<b>Test method:</b>	EN 581-1:2017 Outdoor furniture - Seating and tables for camping, domestic and contract use - Part 1: General safety requirements EN 581-2:2015 Outdoor furniture - Seating and tables for camping, domestic and contract use - Part 2: Mechanical safety requirements and test methods for seating, contract level
<b>Scope:</b>	Complete test
<b>Date of test:</b>	2023-03-10 – 2023-03-31
<b>Test result:</b>	The tested object passed the test
<b>Reservation:</b>	The test results in this report apply solely to the specimen tested
<b>Test environment:</b>	23 ± 2°C and 50 ± 5% relative humidity
<b>Measurement uncertainty:</b>	Decision rule according to EN ISO IEC 17025:2018 clause 3.7 No account is taken of measurement uncertainty when reporting numerical results

### RISE Research Institutes of Sweden AB

#### Department Building and Real Estate - Technical Wood Assessment

Performed by

Examined by



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### Appendices

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

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Accred. No. 1002  
Testing  
ISO/IEC 17025

## Appendix 1

## Test result

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

Table 1

1.	Safety	EN 581-1	Result
1.1	<p><u>General requirements</u></p> <p>In order to avoid physical injury when the product is in its intended position of use, all edges and corners shall be rounded, chamfered or otherwise protected. This applies to:</p> <ul style="list-style-type: none"> <li>- Seating: Edges of the seat, back rest and arm rests and any part of the bottom surface of the seat at a distance less than 120 mm from any edge, where a finger can commonly access;</li> <li>- Tables: Table tops, any part of the underside of the top surface at a distance less than 500 mm from any edge below the table, where a knee and/or an arm can commonly access.</li> </ul> <p>All other parts shall be free from burrs, sharp edges and sharp points.</p> <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 furniture 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>	5.1	Pass
1.2	<p><u>Tubular components</u></p> <p>There shall be no accessible holes in the ends of tubular components with a diameter between 7 mm to 12 mm and with a depth more or equal to 10 mm.</p> <p>The bottom of tubular legs in contact with the floor shall be closed or capped, however, holes in them are allowed as long as they are not between 7 and 12 mm</p>	5.2	Pass
1.3	<p><u>Shear and squeeze points</u></p> <p>Shear and squeeze points that are created only during erecting, adjusting or folding away are acceptable providing the user can be assumed to be in control of his/her movements and to be able to cease applying the force immediately on experiencing pain</p> <p>There shall be no accessible shear and squeeze points created by parts of the furniture operated by powered mechanisms, e.g. mechanical springs and gas lifts</p> <p>There shall be no accessible shear and squeeze points created by loads applied during normal use.</p> <p>Shear and squeeze points are not acceptable if there is a risk of injury created by the weight of the user during normal movements and actions, e.g. attempting to move the seating by lifting the seat or by adjusting the backrest.</p>	5.3	Pass

## Appendix 1

Table 2

2.	Stability	EN 1022:2018	Result
2.1	Forwards overbalancing Requirement $\geq 20$ N	7.3.1	Pass 105 N
2.2	Forwards overturning for seating with footrest	7.3.2	N/A
2.3	Corner stability test Requirement 30 kg	7.3.3	Pass
2.4	Sideways overbalancing, all seating without arms Requirement $\geq 20$ N	7.3.4	Pass 113 N
2.5	Sideways overbalancing, all seating with arms Requirement $\geq 20$ 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 $\geq 159$ N	7.3.6	Pass 190 N

Table 3

3.	Strength, durability	Reference EN 1728	Cycles	EN 581 Contract	Result
3.1	Seat and back static load test	6.4	10	Seat: 2000 N Back: 560 N	Pass
3.1b	Addition static load test	6.4	1/30 min	Seat: 2000 N Back: 560 N	Pass
3.2	Seat front edge static load test	6.5	10	1300 N	Pass
3.3	Seat and back durability test	6.17	50000	Seat: 1000N Back: 333 N	Pass
3.4	Durability test on seating with a multi-position back rest	6.19	20000	Seat: 750 N Back: 250 N	N/A
3.5	Arm downwards static load test	6.11	5	750 N	N/A
3.6	Arm durability test	6.20	30 000	400 N	N/A
3.7	Leg forward static load test	6.15	10	400 N Seat: 1000 N	Pass
3.8	Leg sideways static load test	6.16	10	300 N Seat: 1000 N	Pass
3.9	Seat impact test	6.24	10x2	240 mm	Pass
3.10	Foot rest and leg rest static load test	6.8	10	1200 N	N/A

## Appendix 2

**Test object**

Test object/ID: Seating furniture/Lyre

**Dimensions <sup>1</sup>**

Width: 447 mm

Depth: 530 mm

Height: 835 mm

Seat height: 450 mm

Mass: 8.25 kg

**Components**

Frame/legs: Steel rod, Ø14 mm

Seat/backrest: Olefin strings, Ø4.5 mm

Sampling: The test object was selected by the customer

Date of arrival at 2023-02-01

RISE test laboratory:

Observed defects before testing: No defects

<sup>1</sup> 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



Figure 3



Figure 4

# Verification

Transaction 09222115557490865620

## Document

**1171898B Bebo Objects Lyre EN 581**

Main document

5 pages

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