# Test Report

Report Number:
351360-3-NDS

DANISH
TECHNOLOGICAL
INSTITUTE

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


Init.: JHA/JNAS
Order no.: 351360
Encl.: 2

| | |
|---|---|
| **Assignor:** | FREDERICIA FURNITURE A/S, Treldevej 183, DK-7000 Fredericia |
| **Item:** | **5083 ND 83 Lounge Chair**. See enclosure B for detailed sample description. |
| **Sampling:** | The assignor confirms having selected the product. The product was forwarded by the assignor and received at Danish Technological Institute on 5 February 2026. |
| **Period:** | The test took place from 25 February 2026 to 24 March 2026. |
| **Method:** | EN 16139:2025, Furniture - Strength, durability and safety - Requirements for non domestic seating<br>EN 16139 Test severity L1: General use: E.g. in office buildings, showrooms, public halls, function rooms, cafés, restaurants, canteens, banks, bars.<br>Additional information is given in enclosure B. |
| **Test results:** | **Passed.**<br>The detailed 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. Storage: The test material will be destroyed after 1 month, unless otherwise agreed. |
| **Place:** | Danish Technological Institute, Taastrup, Building and Construction |
| **Signature:** | This document is only valid with a digital signature from Danish Technological Institute. The date of issue appears from the digital signature.<br>Jan Hansen<br>Technical consultant |

DIGITALLY SIGNED DOCUMENT
26 March 2026
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# Test of Model: 5083 ND 83 Lounge Chair

## *Loading according to test severity L1.*

### 4 Safety

| Test no. | Test | Test Method | Result |
|---|---|---|---|
| 4.1 | General requirements | EN 16139, 4.1 | Passed |
| 4.2 | Holes and tubular/rigid components | EN 16139, 4.2 | N/A |
| 4.3.2 | Shear and compression points when setting up and folding | EN 16139, 4.3.2 | N/A |
| 4.3.3 | Shear and compression points under influence of non-electrically powered mechanisms | EN 16139, 4.3.3 | N/A |
| 4.3.4 | Shear and compression points during use | EN 16139, 4.3.4 | Passed |

### 4.4 Stability (other) - EN 1022:2023

| Test No. | Test | Loading | | Result |
|---|---|---|---|---|
| EN 1022, 7.3.1 | Forwards overturning | Vertical force, N<br>Horizontal force, N | 600<br>20 | Passed |
| EN 1022, 7.3.2 | Forwards overturning for seating with footrest | Vertical force, N<br>Horizontal force, N | 600<br>20 | N/A |
| EN 1022, 7.3.3 | Corner stability test | Vertical force, N | 300 | Passed |
| EN 1022, 7.3.4 | Sideways overturning, all seating without armrests | Vertical force, N<br>Horizontal force, N | 600<br>20 | N/A |
| EN 1022, 7.3.5.2 | Sideways overturning, all other seating - Seating with arm rests | Vertical force seat, N<br>Vertical force armrest, N<br>Horizontal force, N | 250<br>350<br>20 | Passed |
| EN 1022, 7.3.5.3 | Sideways overturning, all other seating - Seating with raised edges | Vertical force seat, N<br>Vertical force armrest, N<br>Horizontal force, N | 250<br>350<br>20 | N/A |
| EN 1022, 7.3.6 | Rearwards overturning, all seating with back rests | Vertical force, N<br>Horizontal force, N | 600<br>171 | Passed |
| Additional test procedures for seating with reclining back rests | | | | |
| EN 1022, 7.4.2 | Tilting seating | Back angle, °<br>Load, discs | <br>11 | N/A |
| EN 1022, 7.4.3 | Reclining seating with leg rest | Back angle, °<br>Z distance, mm | | N/A |
| EN 1022, 7.4.4 | Reclining seating without leg rest | Back angle, °<br>Z distance, mm | | N/A |
| EN 1022, 7.4.5 | Rearwards stability test for rocking chairs | Back angle, °<br>Load, discs | <br>8 | N/A |

## 4.5 Strength and durability

| Test no. | Test | Test Method | Cycles | Load | Result |
|---|---|---|---|---|---|
| 4.5.1.1 | Seat static load and back static load test | EN 1728, 6.4 | 10 | Seat: 1600 N<br>Back: 560 N | Passed |
| 4.5.1.2 | Seat front edge static load test | EN 1728, 6.5 | 10 | Seat: 1300 N | Passed |
| 4.5.1.3 | Vertical static load on back | EN 1728, 6.6 | 10 | Seat: 1300 N<br>Back: 600 N | Passed |
| 4.5.1.4.1 | Foot rest static load test | EN 1728, 6.8 | 10 | | N/A |
| 4.5.1.4.2 | Leg rest static load test | EN 1728, 6.9 | 10 | | N/A |
| 4.5.1.5 | Arm rest sideways static load test | EN 1728, 6.10 | 10 | 400 N | Passed |
| 4.5.1.6 | Arm rest downwards static load test | EN 1728, 6.11 | 5 | 750 N | Passed |
| 4.5.1.7.1 | Vertical upwards static load on arm rests | EN 1728, 6.13.1 | 10 | | N/A |
| 4.5.1.7.2 | Vertical upwards static load on arm rests (Stacking seating) | EN 1728, 6.13.2 | | | N/A |
| 4.5.1.8 | Combined seat and back durability test | EN 1728, 6.17 | 100000 | Seat: 1000 N<br>Back: 300 N | Passed |
| 4.5.1.9 | Seat front edge durability test | EN 1728, 6.18 | 40000 | 800 N | Passed |
| 4.5.1.10 | Seat side.to.side durability test | EN 16139, Annex B | 10000 | | N/A |
| 4.5.1.11 | Arm rest durability test | EN 1728, 6.20 | 30000 | 400 N | Passed |
| 4.5.1.12 | Footrest durability test | EN 1728, 6.21 | 30000 | | N/A |
| 4.5.1.13 | Leg rest durability test | EN 16139, Annex C | 10000 | | N/A |
| 4.5.1.14 | Leg forward static load test | EN 1728, 6.15 | 10 | Edge: 500 N<br>(Seat: 1000 N) | Passed |
| 4.5.1.15 | Legs sideways static load test | EN 1728, 6.16 | 10 | Edge: 400 N<br>(Seat: 1000 N) | Passed |
| 4.5.1.16 | Seat impact test | EN 1728, 6.24 | 10 | 240 mm | Passed |
| 4.5.1.17 | Backward fall test | EN 1728, 6.28 | 5 | | Passed |
| 4.5.1.18 | Back impact test | EN 1728, 6.25 | 10 | | N/A |
| 4.5.1.19 | Arm rest impact test | EN 1728, 6.26 | 10 | 210 mm / 38 ° | Passed |
| 4.5.1.20 | Drop test (multiple seating) | EN 1728, 6.27.1 | 2 x 5 | | N/A |
| 4.5.1.21 | Auxiliary writing surface static load test | EN 1728, 6.14 | 10 | | N/A |
| 4.5.1.22 | Auxiliary writing surface durability test | EN 1728, 6.22 | 10000 | | N/A |

## 5 Documentation

| Test no. | Test | Test Method | Result |
|---|---|---|---|
| 5 | Information for use | EN 16139, 5 clause a to g. | Passed |

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## Methods

The following standard method is used in this test report:

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|---|---|
| EN 16139:2025 | Furniture - Strength, durability and safety - Requirements for non domestic seating |
| EN 1728:2012/AC:2013 | Furniture - Seating - Test methods for the determination of strength and durability |
| EN 1022:2023 | Furniture - Seating - Determination of stability |

| | |
|---|---|
| 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. |

## Sample

Description of the item tested:

| | |
|---|---|
| Model: | 5083 ND 83 Lounge Chair |
| Type: | Other seating (not lounger) |
| Armrests: | Yes |
| Legrest: | No |
| Width: | 760 mm |
| Length: | 680 mm |
| Height: | 730 mm |
| Weight: | 13.42 kg |
| Materials: | Paint wood, foam, upholstery |

Photo of the sample as received:

