

# Test Report

Report Number:  
883474-10



**DANISH  
TECHNOLOGICAL  
INSTITUTE**

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Init.: JJU/JJOH  
Order no.: 883474  
Encl.: 2

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

**Item :** FourSure®77

**Sampling:** The assignor confirms having selected the product. The product was forwarded by the assignor and received at Danish Technological Institute on 6 February 2020.

**Period:** The test took place from 11 February 2020 to 10 March 2020.

**Method:** EN 16139:2013, Furniture - Strength, durability and safety - Requirements for non domestic seating  
EN 16139 Test severity L1: General use: E.g. in office buildings, showrooms, public halls, function rooms, cafés, restaurants, canteens, banks, bars.  
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 17025:2005) 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 11 March 2020.  
Jesper Junge Pedersen  
Consultant



DIGITALLY SIGNED DOCUMENT

DANISH TECHNOLOGICAL INSTITUTE



**DANAK**

TEST Reg.no. 2



## Test of Model: FourSure®77

### *Loading according to test severity L1.*

| 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   |                  |                               | Passed |
| 5        | Strength and durability requirements                           | EN 16139, 5     |                  |                               | Passed |
| 6.1.1    | Seat static load and back static load test                     | EN 1728, 6.4    | 10<br>10         | Seat: 1600 N<br>Back: 560 N   | Passed |
| 6.1.2    | Seat front edge static load                                    | EN 1728, 6.5    | 10               | Seat: 1300 N                  | Passed |
| 6.1.3    | Vertical load on back rests                                    | EN 1728, 6.6    | 10               | Seat: 1300 N<br>Back: 600 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               |                               | N/A    |
| 6.1.6    | Arm rest downwards static load test                            | EN 1728, 6.11   | 5                |                               | N/A    |
| 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   | 100000<br>100000 | Seat: 1000 N<br>Back: 300 N   | Passed |
| 6.1.9    | Seat front edge durability test                                | EN 1728, 6.18   | 50000            | 800 N                         | Passed |
| 6.1.10   | Arm rest durability test                                       | EN 1728, 6.20   | 30000            |                               | N/A    |
| 6.1.11   | Foot rest durability test                                      | EN 1728, 6.21   | 50000            |                               | N/A    |
| 6.1.12   | Leg forward static load test                                   | EN 1728, 6.15   | 10               | Edge: 375 N<br>(Seat: 1000 N) | Passed |
| Comment  | Loading reduced to 375 N to avoid tilting                      |                 |                  |                               |        |
| 6.1.13   | Legs sideways static load test                                 | EN 1728, 6.16   | 10               | Edge: 350 N<br>(Seat: 1000 N) | Passed |
| Comment  | Loading reduced to 350 N to avoid tilting                      |                 |                  |                               |        |
| 6.1.14   | Seat impact test                                               | EN 1728, 6.24   | 10               | 240 mm                        | Passed |
| 6.1.15   | Back impact test                                               | EN 1728, 6.25   | 10               | 210 mm / 38 °                 | Passed |
| 6.1.16   | Arm Impact Test                                                | EN 1728, 6.26   | 10               |                               | N/A    |
| 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   | 10000            |                               | N/A    |
| 7        | Information for use                                            | EN 16139, 7     |                  |                               | N/A    |



### 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

#### Details of tested seating:

|                   |                                                                                                                                  |               |        |                |        |                |        |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|--------|----------------|--------|
| <b>Model:</b>     | FourSure®77                                                                                                                      |               |        | <b>Type:</b>   | Chair  |                |        |
| <b>Length:</b>    | 448 mm                                                                                                                           | <b>Depth:</b> | 530 mm | <b>Height:</b> | 830 mm | <b>Weight:</b> | 6.2 kg |
| <b>Materials:</b> | Chair shell: Ecolabel - also covers the standard shell of Polypropylen. Castors: With brake unloaded - also covers without brake |               |        |                |        |                |        |

#### 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:

2020-02-11 to 2020-03-10

#### Photo of the received sample:

