

Test report 16-9173

Article: Neolite
Plastic chell, sledge

Test requested by: Jan Jismyr
Material AB
Tranås Sweden



Tests are carried out according to standard: EN 16139:2013, test severity level 1

Discrepancies: None

Result and observations: The sample submitted for test fulfils the requirements in above mentioned standards.

Measurement: Detailed information about measurement uncertainty is provided on request by Kinnarps Test and Verification Center.

Report: This report relates to sample submitted for test and no other. The report may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Kinnarp 24th of May 2016



Daniel Landberg
(Approved by)



Susanne Norling
(Tested by)

Item description

Date of

- **manufacture:** 160421
- **arrival:** 160425
- **test:** 160504 - 160524

Materials, construction

- Seat and backrest:** Plastic chell
- Armrest:** -
- Under frame:** Solid steel, plastic glides

Dimensions (mm)

- | | | | |
|----------------------|-----|-----------------------------------|-----|
| Total width: | 545 | Sitting height: | 450 |
| Total depth: | 520 | Seat width: | 440 |
| Total height: | 800 | Seat depth: | 400 |
| Seat height: | 470 | Height of armrest: | - |
| Weight (kg): | 7kg | Distance between armrests: | - |

Test conditions

- Laboratory atmosphere:** (20 ± 5)° C Within limits during test

Test description

EN 16139:2013 Annex B (informative)

The table below shows the type of use that might be expected from furniture in relation to two test severities.

Test severity	Type of Use	Application
L1	General use	Areas in which seating is usually intended for mixed use (short-time and for a period of several hours, light to heavy load). Example of end-use: All kind of applications in office buildings, showrooms, public halls, function rooms, cafés, restaurants, canteens, banks, bars.
L2	Extreme use	Areas in which seating is occasionally or repeatedly subject to extremely high loads due to their specific types of use or due to improper use. Examples of end-use: Night -clubs, police stations, transport terminals, sport changing rooms, prisons, barracks (non-controlled areas).

It should be noted that some end uses may be covered by more than one requirement depending on the severity of the expected use.

This applies particularly to furniture in nursing homes and public areas in hospitals. These types of furniture are subject to test severity L1. But for seating fulfilling the requirements "Seating which may be moved when occupied", the test "Vertical upwards static load on arm rests" in accordance with Table 1 (Test 7) should be carried out with test severity L2.

Test and method	Requirements	Test results	Pass/Fail or N/A
Rearwards overbalancing			
Chairs without backrest inclination Vertical force 600 N Horizontal force backrest 192 N	no overturning	-	N/A
Chair with backrest inclination Load 11 discs x 10 kg	no overturning	-	N/A
Forwards overturning for seating with footrest Vertical force on the footrest 600 N	horizontal min. 20 N no overturning	-	N/A
Non swivelling chairs 4.3.3			
Forward Vertical force 600 N	horizontal min. 20 N no overturning	49N	Pass
Sideways without arm rests Vertical force 600 N	horizontal min. 20 N no overturning	140N	Pass
Sideways with arm rests Vertical force on seat 250 N Vertical force on armrest 350 N	horizontal min. 20 N no overturning	-	N/A
Rearward Vertical force 600 N	horizontal min.158 N no overturning	166N	Pass
Forwards overturning for seating with footrest Vertical force on the footrest 600 N	horizontal min. 20 N no overturning	-	N/A
Rolling resistance of the unloaded chair 4.4			
Rolling resistance	≥ 12 N	-	N/A
Castors	of the same type	-	N/A
<p>EN 16139: 2013 5. Safety, strength and durability requirements These safety, strength and durability requirements are fulfilled when during and after testing:</p> <ul style="list-style-type: none"> a) There are no fractures of any member, joint or component; b) There are no loosening of joints intended to be rigid; c) No major structural element is significantly deformed; d) The chair fulfils its functions after removal of the test loads. 			

Test and method	Requirements		Test results	Pass/Fail or N/A
	Level 1	Level 2		
STRENGTH AND DURABILITY				
EN 16139:2013 5				
Seat and back static load	10 times vertical force horizontal force	1 600 N 560 N (min. force 410)	2 000 N 700 N (min. force 410)	No remarks Pass
Seat front edge static load	10 times vertical force	1 300 N	1 600 N	No remarks Pass
Vertical static load on back.	10 times vertical force seat load	600 N 1300 N	900 N 1800 N	No remarks Pass
Foot rail / foot rest and leg rest static load	10 times force	1 300 N	1 600 N	- N/A
Arm sideways static load between armrests	10 times horizontal force	400 N	900 N	- N/A
Arm downwards static load	5 times vertical force	750 N	900 N	- N/A
Vertical upwards static load on armrests	10 times	Seat load 250 N or lift stack	Seat load 1 200 N	- N/A
Seat and back fatigue	Cycles vertical force horizontal force	100 000 c 1 000 N 300 N	200 000c 1 000 N 300 N	No remarks Pass
Seat front edge fatigue	Cycles vertical force	50 000 c 800 N	100 000c 800 N	No remarks Pass
Arm fatigue	Cycles force	30 000 c 400 N	60 000c 400 N	- N/A
Foot rest/foot rail fatigue	Cycles force	50 000 c 1000 N	1 00 000c 1000 N	- N/A
Leg forward static load <small>If the item tends to overturn, reduce the force to a magnitude that just prevents overturning</small>	10 times force seat load	500 N 1 000 N	620 N 1 800 N	No remarks Pass
Leg sideways static load <small>If the item tends to overturn, reduce the force to a magnitude that just prevents overturning</small>	10 times force seat load	400 N 1 000 N	760 N 1 800 N	No remarks Pass
Seat impact test	10 times Drop height	240 mm	300 mm	No remarks Pass

Test and method		Requirements		Test results	Pass/Fail or N/A
		Level 1	Level 2		
Back impact test (test for heavy chair)	10 times Height of fall	210mm/38°	330 mm/48°	-	N/A
Arm impact test	10 times Height of fall	210mm/38°	330 mm/48°	-	N/A
Drop test (multiple seating)	2x5 times Drop height	Not applicable	450mm	-	N/A
Auxiliary writing surface Static load test	10 times Force	300 N	300 N	-	N/A
Auxiliary writing surface fatigue	Cycles Force	10 000c 150 N	20 000c 150 N	-	N/A
Additional test for specific applications EN 16139:2013 Annex A.1 (informative)					
Drop test for stacking seating	10 times Drop height	150 mm	200 mm	-	N/A
Backward fall test (test for light chair)	Times	5	5	No remarks	Pass
Drop test from the height of a table (5 times on one front leg and 5 times on one rear leg)	Drop height	600 mm	600 mm	-	N/A
Dimension requirements for office visitor chairs In accordance with EN 1335-1:2000 EN 16139:2013 Annex C (Informative)					
Seat height [a] Fixed Adjustable	C.2.1	Between 400mm and 500mm Minimum range 420-480 mm		445	Pass
Seat depth [b]	C.2.2	Between 380mm and 470mm		400	Pass
Seat Width [d]	C.2.3	Min 400 mm		440	Pass
Distance between arm rests [r]	C.2.4	Min 460 mm		-	N/A
<p>EN 16139:2013 7. Information for use Information for use shall be available in the language of the country in which it will be delivered to the end user. It shall contain at least the following details:</p> <p>a) Information regarding the intended use (see Annex B); b) If the chair is fitted with adjusting mechanisms: instruction for operating the adjusting mechanism; c) Assembly instructions, where applicable; d) Instruction for the care and maintenance of the chair; e) If the seating is fitted with castors: information on the choice of castors in relation to the floor surface.</p>					

End of report