

Internrapport 17- 10182

Article: Neolite BP630
Test requested by: Jan Jismyr
Materia AB
Tranås Sweden



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

This European standard specifies requirements for the safety, strength and durability of all types of non-domestic seating, including office visitor chairs, intended to be used by adults with a weight of not more than 110 kg.

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 13st of November 2017



Approved by Daniel Landberg
Manager Kinnarps Test- & verification Center



Tested by Susanne Norling
Test technician

Item description

Date of

- manufacture: 170904
- arrival: 170907
- test: 170928 - 171113

Materials, construction

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

Dimensions (mm)

- | | | | |
|----------------------|-------|-----------------------------------|-----|
| Total width: | 555 | Sitting height: | 750 |
| Total depth: | 460 | Foot rest height | 360 |
| Total height: | 980 | Seat width: | 420 |
| Seat height: | 770 | Seat depth: | 400 |
| Weight (kg): | 7,6kg | Height of armrest: | - |
| | | 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
SAFETY General	EN 16139:2013		
Accessible parts in sitting position	shall be rounded or chamfered and free from burrs	No remarks	Pass
End of hollow components	closed or capped	-	N/A
Movable and adjustable parts designed so	injures and inadvertent operations shall be avoided	-	N/A
Adjustable/connection parts	no chance to come loose	-	N/A
Lubricated parts	not accessible	-	N/A
Shear and squeeze points movable parts			
Shear and squeeze points when setting up and folding	Acceptable	-	N/A
Shear and squeeze points created by powered mechanism	Not acceptable	-	N/A
Shear and squeeze points during normal use	Not acceptable	-	N/A
STABILITY Non swivelling chairs			
Forward Vertical force 600 N	horizontal min. 20 N no overturning	27N	Pass
Sideways without arm rests Vertical force 600 N	horizontal min. 20 N no overturning	95N	Pass
Sideways with arm rests Vertical force on seat 250 N Vertical force on armrest 350 N	horizontal min. 20 N no overturning		
Rearward, chair with backrest Vertical force 600 N	horizontal min. 80N no overturning	113N	Pass
Forwards overturning for seating with footrest Vertical force on the footrest 600 N	horizontal min. 20 N no overturning	22 N	Pass

Test and method EN 1728:2012		Requirements EN 16139:2013		Test results	Pass/Fail or N/A
		Level 1	Level 2		
STRENGTH AND DURABILITY					
Seat and back static load	vertical force horizontal force 10c	1 600 N 560 N (min. force 410)	2 000 N 700 N (min. force 410)	No remarks	Pass
Seat front edge static load	vertical force 10c	1 300 N	1 600 N	No remarks	Pass
Vertical static load on back.	vertical force seat load 10c	600 N 1300 N	900 N 1800 N	No remarks	Pass
Foot rail / foot rest and leg rest static load	Force 10c	1 300 N	1 600 N	No remarks	Pass
Arm sideways static load between armrests	horizontal force 10c	400 N	900 N	-	N/A
Arm downwards static load	vertical force 5c	750 N	900 N	-	N/A
Vertical upwards static load on armrests	10 c	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	No remarks	Pass
Leg forward static load If the item tends to overturn, reduce the force to a magnitude that just prevents overturning	force seat load 10c	500 N 1 000 N	620 N 1 800 N	No remarks	Pass
Leg sideways static load If the item tends to overturn, reduce the force to a magnitude that just prevents overturning	force seat load 10c	400 N 1 000 N	760 N 1 800 N	No remarks	Pass
Seat impact test	Drop height 10c	240 mm	300 mm	No remarks	Pass

Test and method EN 1728:2012		Requirements EN 16139:2013		Test results	Pass/Fail or N/A
		Level 1	Level 2		
Back impact test (test for heavy chair)	Height of fall 10 c	210mm/38°	330 mm/48°	-	N/A
Arm impact test	Height of fall 10 c	210mm/38°	330 mm/48°	-	N/A
Drop test (multiple seating)	Drop height 2x5 c	Not applicable	450mm	-	N/A
Auxiliary writing surface Static load test	Force 10 c	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	Drop height 10 c	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 table10 times (5 times on one front leg and 5 times on one rear leg)	Drop height	600 mm	600 mm	-	N/A

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:

- 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.

End of report