



# CENTRE FOR TESTING AND CERTIFICATION - MECH-TEST

## Mechanical Laboratory

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Date 10.07.2017

### TEST REPORT NO. **CBC-138/2017**

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Subject of testing:	<i>Assistive products for walking manipulated by one arm</i>	Classification according to PN-EN ISO 9999:2011 :	12 03 03
Type / Model:	<i>Foldable walking cane</i>	Item. no.:	315016
Manufacturer:	<i>MOBILEX A/S, Grønlandsvej 5, DK-8660 Skanderborg</i>	Number of specimens:	2
Applicant:	<i>A-Net s.c., ul. Łaskowice 174, 93-469 Łódź</i>		
Kind of testing	<i>Mechanical testing for conformity with PN-EN 11334-1:2007 - clause 4,6; methods – clause 5</i>		

Test started: 22.06.2017

Test finished: 10.07.2017

Approved by:

DYREKTOR  
  
mgr inż. Andrzej Tkaczyk

Special comments / enclosures:

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Test results refer only to tested units.

Test results reported here are not applicable to the further modifications of the product affecting his structure, material or technology

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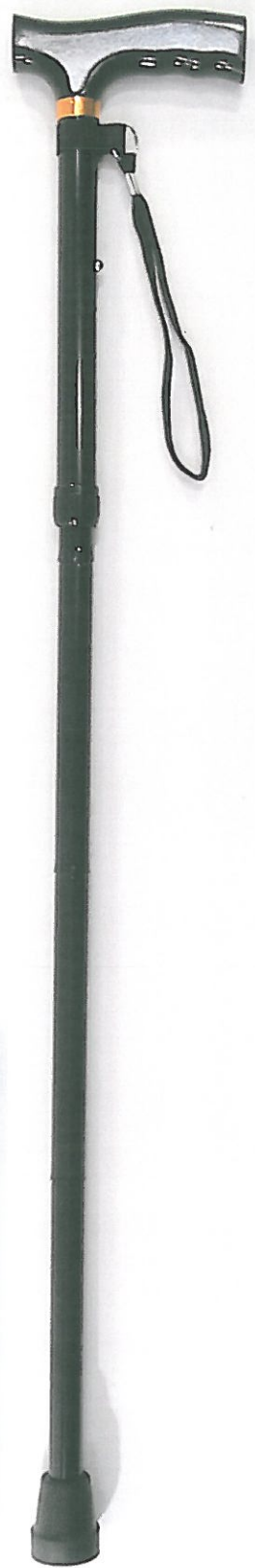



**CHARACTERISTIC OF STICK**

Name : *Foldable walking cane*

Maximum permissible user mass: *100 kg*


Mass of stick: *385 g*


Description		Comments	PHOTO OF PRODUCT	
Dimensions of stick:	Overall height of stick:	min.	847 mm	5 positions of adjustment
		max.	947 mm	
	Leg section length (l):	min.	--	
		max.	--	
		number of fixing positions	--	
	Arm section length (a):	min.	--	
		max.	--	
		number of fixing positions	--	
	Handgrip length (h):		125 mm	
	Handgrip width:		N/T	
	Cuff internal width (y):		--	
	Cuff internal depth (x):		--	
	Cuff internal height (z):		--	
Support angle (α):		--		
Grip angle (β):		--		
Tip diameter:		39 mm		
Material:	Leg section :		Tubes – aluminum Ø 22 mm, Ø 19 mm	
	Handgrip :		Plastic Black colour	
	Arm section:		--	
	Cuff:		--	
	Tip:		Rubber Black colour	
Reflective elements	back	Not included		
	front	Not Included		

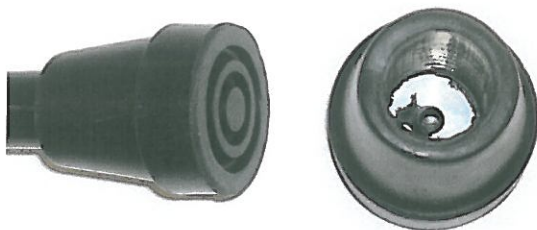


**Foldable walking cane**

MOBILEX A/S  
Grønlandsvej 5  
DK-8660 Skanderborg  
Tel: +45 87 93 22 20  
www.mobilex.dk

  
 Max. 100 kg

 Produced  Serial no.



## RESULT OF TESTS ACCORDING TO PN-EN ISO 11334-1:2007

Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters	Test result	Opinion	Comments	
1	2	3	4	5	6	
	Measur.	Dimensions of stick	Overall height of stick (min.)	847 mm	N/R	
	Measur.		Overall height of stick (max.)	947 mm	N/R	
	Measur.		Leg section length ( $l_{min.}$ )	--	N/A	
	Measur.		Leg section length ( $l_{max.}$ )	--	N/A	
	Measur.		Arm section length ( $a_{min.}$ )	--	N/A	
	Measur.		Arm section length ( $a_{max.}$ )	--	N/A	
	Measur.		Handgrip length (h)	125 mm	N/R	
	Measur.		Handgrip width (S)	--	N/T	NOTE 2
	Measur.		Cuff internal depth (x)	--	N/A	
	Measur.		Cuff internal width (y)	--	N/A	
	Measur.		Cuff internal height (z)	--	N/A	
	Measur.		Width of opening in cuff	--	N/A	
	Measur.		Support angle $\alpha$	--	N/A	
	Measur.		Grip angle $\beta$	--	N/A	
	Measur.		Tip diameter	39 mm	Pos.	
	Measur.		Mass of stick	385 g	N/R	
4.1	V/I	Cuff	Securely fixing of cuff	--	N/A	
	V/I		Internal cuff dimensions	--	N/A	
	Measur.		Position of internal cuff surface towards its support line	--	N/A	
	Measur.		Relation of internal cuff depth to its internal width	--	N/A	
	Measur.		Cuff internal height (z)	--	N/A	
	5.4		Withdrawal test	--	N/A	
4.2	V/I	Handgrip	Securely fixing of handgrip	Conf.	Pos.	
	Measur.		Handgrip resistance to sliding of hand when crutch is in use	Conf.	Pos.	
	V/I		Handgrip width :	--	N/T	Handgrip width required $\geq 25mm$ $i \leq 50mm$ NOTE 2
	Measur.		Ease of clearing	Conf.	Pos.	
4.3	5.3	Leg section and tip	Construction, tip characteristics	Conf.	Pos.	
	V/I		Tip diameter	39 mm Conf.	Pos.	Tip diameter required $\geq 35mm$
4.4	V/I	Adjusting devices	Fastness to loosening of height adjustment elements	Conf.	Pos.	
	V/I		Maximum extension of the height adjustment, marked on the adjusting members	Conf.	Pos.	
	V/I		Possibility of adjustment elements operation without use of tools	Conf.	Pos.	
4.5	V/I	Materials	--	N/T	Manufacturer's declaration	

Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters		Test result	Opinion	Comments
1	2	3		4	5	6
4.6	5.5	Mechanical durability	Stick element separation test (including handgrip)	Conf.	Pos.	loading 500N NOTE 1:
	5.6		Static loading test	Conf.	Pos.	loading 1000N
	5.7		Fatigue strength of stick	1 000 000 cycles	Pos.	loading 550N
	5.8		Low temperature falling test	Conf.	Pos.	
PN-EN 1041	V/I	Information supplied by the manufacturer		--	N/T	
6.2	V/I	Marking and labelling		Conf.	Pos.	
6.3						
<b>Test conditions:</b>		Temperature of air		21°C	Temperature required 21°C +/-2°C	
		Relative humidity of air:		41%	N/R.	
<i>Comments:</i>						
All tests were performed at maximum height of sticks						
Two sticks of the same type and kind were tested: one was put to fatigue test and separation test, the other was put to static loading test and low temperature falling test.						
Sequence of tests: measurements, separation test, static loading test, fatigue test, stability test, low temperature falling test.						
During visual inspection before testing any visible defects that could have influence on test results were not stated.						

Pos. – positive; Neg – negative; N/T – not tested; N/A – not applicable; N/R – not required, N/O – not occurred, V/I.- visual inspection, Conf.- conformed.

NOTE 1: The test related to the button cell clamp and fitting the tube in the handgrip

NOTE 2: Manufacturer excluded from tests measuring the width of the handgrip

#### CONCLUSIONS:

Test object **complies** with requirements of PN-EN ISO 11334-1:2007 - „Assistive products for walking manipulated by one arm. Elbow crutches. Requirements and test methods” – clauses 4, 6 (methods – clause. 5) with the exception of tests of biological compatibility of the material with the human body according to PN-EN ISO 10993-1:2010 and measuring the width of the handgrip

---- END ----

## INFORMATION SUPPLIED BY THE MANUFACTURER

Name of product: *Foldable walking cane*Applicant: *A-Net s.c.**93-469 Łódź, ul. Łaskowice 174*

Requirement according to PN-EN ISO 11334-1:2007		Included
<b>6.2 Information of product</b>		
6.2a	Maximum permissible user mass	<i>N/T</i>
6.2b	Manufacturer's name or trade name and address	<i>N/T</i>
6.2c	Manufacturer's model identification name and/or number	<i>N/T</i>
6.2d	Month and year of manufacture	<i>N/T</i>
6.2e	Maximum extension of the height adjustment, marked on the adjusting members	<i>N/T</i>
<b>Information in documentation, on tag or on product</b>		
6.3a	Maximum arm section length $a_{max}$	<i>N/T</i>
6.3b	Minimum arm section length $a_{min}$	<i>N/T</i>
6.3c	Maximum leg section length $l_{max}$	<i>N/T</i>
6.3d	Minimum leg section length. $l_{min}$	<i>N/T</i>
6.3e	Support angle $\alpha$	<i>N/T</i>
6.3f	Cleaning instructions, including a description of the method and suitable cleaning agents and any precautions needed to avoid corrosion and/or ageing of the materials used in construction of the elbow crutch	<i>N/T</i>
6.3g	Instructions for assembly, adjustment of all kinds, folding and unfolding, if applicable	<i>N/T</i>
6.3h	Warnings and advice about precautions relating to safe distances between moving and stationary parts, if applicable (see EN 12182:2012, Clauses 12 and 13, for guidance)	<i>N/T</i>
CE Marking		<i>N/T</i>

*N/A- not applicable, N/T – not tested*