



ZENIČKA RAZVOJNA AGENCIJA  
ZENICA DEVELOPMENT AGENCY




LIND Laboratorija za ispitivanje sigurnosti proizvoda  
LIND Laboratory for product safety testing

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## TEST REPORT

**PI / 01 / 18**

(LIND identification mark)

Customer and address: <b>YIELD d.o.o.</b> Hamdije Kreševljakovića 64 Sarajevo, BiH	Number from ZEDA Protocol book		LIND identification mark of test item  <b>PI / 01 / 18</b>
	Enter: 01-42-706/17	Exit: 01-42-706-5/17	
Test item:	<p>Furniture for seating - non-domestic seating with armrests - chair "MUNA"</p> 		
Standards:	<p>According to the ZEDA offer No. 01-42-706-1/17 dated on 13.12.2017 and test order YIELD Ltd. No. 01/2017 dated on 15.12.2017, testing "MUNA" chair is performed according to the requirements of standards:</p> <ul style="list-style-type: none"> <li>- BAS EN 16139:2014 + BAS EN 16139/Cor1:2014 Furniture - Strength, durability and safety - Requirements for non-domestic seating</li> </ul>		
Test results:	<p>According to the test results we concluded that test item PI/01/18: <u>FULFILS</u> requirements of standards BAS EN 16139:2014 + BAS EN 16139/Cor1:2014.</p>		
Comment:	<p>Test results are given in the Annex A of Test report PI/01/18 (pages 1. - 2.)</p>		

Test report is made by: Manager of LIND  Amir Kubat	Date of issuing:  21.02.2018	Approved by: Director of ZEDA Agency  Senad Pašalić	Page  1 / 1
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BAS EN ISO/IEC 17025



LI-74-01

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OL5-10-02-4

LIND - Accredited laboratory for performing mechanical testing of furniture and equipment for playground

### TEST RESULTS – PI/45/17

PRODUCT DATA	
<b>Title of the product / test item:</b> Furniture for seating - non-domestic seating with armrests – chair "MUNA"	<b>Dimensions:</b> Chair height: 760 mm      Seat height: 450 mm Seat width: 450 mm      Seat depth: 445 mm Back width: 480 mm
<b>Material of the product/ test item:</b>	Construction – solid wood, oak Seat – upholstered with textile
<b>Description of the product/ test item:</b>	Furniture for seating - non-domestic seating with armrests
<b>Date of the test item receipt:</b>	08.01.2018
<b>Air-conditioned:</b>	from 09.01.2018 to 10.01.2018

Images of test item – chair "MUNA"



TEST RESULTS – chair "MUNA"							
Test according to the clause of standard:	Requirements of standard					Result	Requirements fulfilled YES/NO
	Number of cycles/ time	Value and unit	Weight (kg)	Adjustability ....	....		
<b>BAS EN 16139:2014 + BAS EN 16139/Cor1:2014 Furniture - Strength, durability and safety - Requirements for non-domestic seating</b>							
<b>4 Safety</b>							
4.1 General	/	According to the standard from a to e				/	YES
4.2.1 Shear and squeeze points when setting up and folding	/	Without shear and squeeze				/	/
4.2.2 Shear and squeeze points when setting up and folding under influence of powered mechanism	/	Without shear and squeeze				/	/
4.2.3 Shear and squeeze points during use	/	Without shear and squeeze				/	YES
4.3 Stability - 4.3.1 General	Fulfilled requirements from a) to e)					/	YES
4.3.3 Non swivelling chairs	Fulfilled requirements of BAS EN 1022:2009					/	YES
5. Safety, strength and durability requirements <sup>a</sup>	If the requirements of this clause of standard and the requirements of Table 1 are fulfilled					/	YES
<b>BAS EN 1022:2009 Domestic furniture- Seating - Determination of stability</b>							
6.2 Forwards overbalancing, all seating (BAS EN 1022)	5 sec.	600 N Horiz. force 20 N				Overb. force N 134 N	YES
6.5 Sideways overbalancing, all seating with arms (BAS EN 1022)	5 sec.	a 350 N s 250 N a Horiz. force 20 N				Overb. force N 74 N	YES
6.6. Rearwards overbalancing, all seating with backs (BAS EN 1022)	5 sec.	s b b	F=0,2857x(1000-H)= =153,9 N			Overb. force N 160,5 N	YES

**TEST RESULTS – continuation – chair “MUNA”**

Test according to the clause of standard:	Requirements of standard					Result	Requirements fulfilled YES/NO
	Number of cycles/time	Value and unit	Weight (kg)	Adjustability ....	....		
<b>BAS EN 16139:2014 + BAS EN 16139/Cor1:2014 Furniture - Strength, durability and safety - Requirements for non-domestic seating</b>							
4.5 Safety of the construction	If the requirements from clause 6 of this standard Table 1 are fulfilled			Connection with: BAS EN 1728:2014 + BAS EN 1728/Cor1:2014		/	YES
<b>6 Test methods</b>							
- Test order according to the Table 1 of standard BAS EN 16139:2014 + BAS EN 16139/Cor1:2014 (BAS EN 1728:2014 + BAS EN 1728/Cor1:2014)							
Table 1- Safety, strength and durability tests							
Ord.No. from Table 1	Test	Number of cycles	Loading	Level		Result	Requirements fulfilled YES/NO
				L1	L2		
1.	6.4 Seat and back static load test	10	Seat: Back:	<b>1600 N</b> <b>560 N</b> (min 410 N)	2000 N 700 N (min 410 N)	10x	YES
2.	6.5 Seat front edge static load test	10	Force:	<b>1300 N</b>	1600 N	10x	YES
3.	6.6 Vertical static load on back	10	Seat: Back:	<b>1300 N</b> <b>600 N</b>	1800 N 900 N	10x	YES
5.	6.10 Arm sideways static load test	10	Force:	<b>400 N</b>	900 N	10x	YES
6.	6.11 Arm downwards static load test	5	Force:	<b>750 N</b>	900 N	5x	YES
7.	6.13 Vertical upwards static load on arm rests	10 times during $\geq 10s$	Seat load:	<b>250 N or lift stack with max 8 chairs of max 25 kg</b>	1200 N	10x	YES
8.	6.17 Seat and back durability test	100.000	Seat: 1.000 N Back: 300 N (min. force not defined)	Cycles: <b>100.000 x</b>	200000 x	100.000x	YES
9.	6.18 Seat front edge durability test	50.000	Cycles: 800 N	<b>50.000 x</b>	100000 x	50.000x	YES
10.	6.20 Arm durability test	30.000	Cycles: 400 N	<b>30.000 x</b>	60.000 x	30.000x	YES
12.	6.15 Leg forward static load test	10	Force: Seat:	<b>500 N</b> <b>1000 N</b>	620 N 1800 N	10x	YES
13.	6.16 Leg sideways static load test	10	Force: Seat:	<b>400 N</b> <b>1000 N</b>	760 N 1800 N	10x	YES
14.	6.24 Seat impact test	10	Impact hammer with mass of 25 kg from the height:	<b>240 mm</b>	300 mm	10x	YES
15.	6.25 Back impact test	10	Impact hammer	<b>210/38°</b>	330/38	10x	YES
16.	6.26 Arm impact test	10	Impact hammer of 6,5kg Height of fall, mm: Angle of fall, ° :	<b>210 mm</b> <b>38°</b>	330 mm 48°	10x	YES
Remark: L1 for general use; L2 for extreme use; For detail explanation see Annex B of standard BAS EN 16139:2014							
7 Information for use						/	YES
<b>LEGEND:</b> YES – requirement fulfilled; NO – requirement not fulfilled; / - not requested; X – a requirement of standard not tested s – seat; b – back; r – arm rest							

**Ambient conditions during test:**

- Temperature: from 17,8 to 20,2 °C - Requirement of standard fulfilled: **YES / NO**
- Relative humidity: from 48,1 to 50,5 % - Requirement of standard fulfilled: **YES / NO**

**Comment:** Tests according to the clauses of standard that are not listed in the specified column with related ordinal numbers, are NOT standard provided and applicable for this test item.

OL5-04-01-2

Date of test start: 11.01.2018

Test performed and working order filled by:

Sanel Ibrić / Emir Čaplja

*Sanel Ibric / Emir Caplja*  
Test performer

Test results PI/01/18



Date of test completion: 20.02.2018

Checked/Approved by:

Amir Kubat

*Amir Kubat*  
Manager of LIND

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