

**Laboratorium Badań Surowców
i Wyrobów Włókienniczych**Siedziba: ul. Brzezińska 5/15, 92-103 Łódź, tel. +48(0) 42 6163140
Siedziba: ul. Gdańska 118. 90-520 Łódź. tel. +48(0) 42 2534421

AB 164

LABORATORY OF TESTING TEXTILE RAW MATERIALS AND FABRICS
Testing Laboratory accredited by the Polish Centre for Accreditation**TEST CERTIFICATE NO. BM 2.13.1.2 / 2015 / B / A**

1. **Test ordered by:** „TOPTEXTIL” Sp. z o.o., Wadowicka Str.12; 30-415 Kraków
2. **Name and description of tested material:** the sample: *the upholstery fabric REAL*, declared raw material composition: 100 % Polyester
3. **Date of receiving material for testing:** 25.08.2015
4. **Date of test performance:** 02.09.2015
5. **Samples taken by:** correct sample size in appropriate state for testing, taken by the Client and delivered without the Sampling Protocol
6. **Tests carried out according to:** methods presenting in testing table

Results of Laboratory Tests

see page 2/2

Test performed by: Danuta Ławniczak

1. *Test results refer only to the tested material.*
2. *Neither of the parts of this Test Certificate can be copied without written permission of the Head of the Laboratory; it can be copied only as a whole document.*
3. *Test Certificate presents test results included within accreditation field of testing.*
4. *Test results not included in accreditation scope, if occur, are marked with *) in the test results table, at the parameter name.*
5. *Measurement uncertainty, if it is specified, has been determined according to the recommendations presented in document EA-4/16. Presented values of uncertainty constitute expanded uncertainty at 95% confidence level and coverage factor $k = 2$.*

**Certificate date:** 03.09.2015**Number of Certificate copies:** 3**Test Certificate handed to:**

- 1) TOPTEXTIL Sp. z o.o., Kraków -- 2 copies
- 2) Laboratory of Testing Textile Raw Materials and Fabrics - 1 copy

Certificate prepared by:

Patrycja Bąk

Person authorizing the Test Certificate:

Name and surname: Halina Królikowska

Function: ^{Kierownik} Head of the LaboratorySignature:
Laboratorium Badań Surowców
i Wyrobów Włókienniczych
Instytut Włókiennictwa

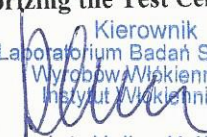
mgr inż. Halina Królikowska -verte-

TEST CERTIFICATE NO. BM 2.15.2.2 / 2015 / B / A

Parameter		Value	Remarks
Propensity to surface fuzzing and pilling,	<i>the number of rubs</i>		PN-EN ISO 12945-2:2002 (modified Martindale method) <i>Test conditions:</i> the abradant: the standard woolen fabric; mass of weight: 415 ± 2 g;
	500	5	
	1 000	5	
	2 000	4 - 5 Slight surface fuzzing	
Evaluation according to PN-EN 14465:2005+A1:2007: A category: grade ≥ 4 – 5; B category: grade 4; C category: grade 3 – 4; D category: grade 3			

_____ The end of Test Certificate _____


Person authorizing the Test Certificate

Kierownik
 Laboratorium Badań Surowców
 Włókienniczych
 Instytut Włókiennictwa

 mgr inż. Halina Królikowska

TEST CERTIFICATE NO. BM 2.15.2.1 / 2015 / B / A

Parameter	Value	Remarks
Seam slippage resistance, mm: <u>Warp</u> The mean value of seam slippage resistance for lengthwise direction, mm - individual results, mm	4 3,5; 3,5; 4; 4; 4	PN-EN ISO 13936-2:2005 <i>Test conditions:</i> tensile tester: Hounsfield H50 KM, testing force: 180 N, 100% PES sewing threads (74 ± 5) tex, the number of sewing needle: 110 the number of stitch: 32±2/100 mm rate of extension: 50 mm/min. number of testing specimens: 5
<u>Weft</u> The mean value of seam slippage resistance for crosswise direction, mm - individual results, mm	5 5; 4,5; 4,5; 4,5; 4,5	
Evaluation: according to PN-EN 14465:2005 + A1:2007 requirements level: A category: ≤ 4 mm; B category: ≤ 6 mm; C category: ≤ 8 mm		

The end of Test Certificate _____


Person authorizing the Test Certificate
 Laboratorium Badań Surowców
 i Wyrobów Włókienniczych
 Instytut Włókiennictwa

 mgr inż. Halina Królikowska

TEST CERTIFICATE NO. BM 2.15.2.3 / 2015 / B / A

Parameter	Value	Remarks	
Abrasion resistance, number of rubs	color change after 3 000 rubs, grade of grey scale	PN-EN ISO 12947-2:2000 + AC:2006 + PN-EN 14465:2005+A1:2007, Annex A <i>Test conditions:</i> the abradant: the standard woollen fabric, the nominal pressure used in the test: 12 kPa, magnification factor in the magnifying device: 8, in holders used foam. Criterion of <u>destruction of the testing</u> <u>specimens in accordance with that standard:</u> at least three threads completely destroyed	
	1 specimen		4 - 5
	2 specimen		100 000 lack of completely destruction
	3 specimen		100 000 lack of completely destruction
	4 specimen		100 000 lack of completely destruction
Total abrasion resistance (the lowest individual result)		100 000 lack of completely destruction	

Evaluation:
 according to PN-EN 14465:2005 + A1:2007: **A category: number of rubs \geq 35 000 rubs,**
 B category: number of rubs: 12 000 ÷ 30 000, **C category: number of rubs: 4 000 ÷ 10 000**

The end of Test Certificate _____

Person authorizing the Test Certificate
 Kierownik
 i Wyrobów Włókienniczych
 Instytut Włókiennictwa
 mgr inż.  Hanna Królikowska

Test Certificate



This certificate confirms that the

Fabric - Ref: ROYAL

Supplied by

Toptextil Sp Z.o.o

has been tested at FIRA International Limited and successfully satisfied the requirements from:

Schedule 4 Part 1 (when tested in combination with a conventional urethane foam of nominal density 20-22kgm³, and an 85g thermally bonded polyester fibre wrap) and Schedule 5 Part I of The Furniture and Furnishings (Fire) (Safety) Regulations 1988, amended 1989, 1993 and 2010. (Based on BS 5852: 1979 Part 1).

The material was watersoaked and line dried prior to test in accordance with the standards.

Report reference: TFFLF61547

SIGNATURE

Liz Morey

POSITION

Technical Specialist

CERTIFICATE DATE

19 October 2015

For and on behalf of FIRA INTERNATIONAL LIMITED



This certificate only relates to the sample(s) supplied and tested at the time. Re-testing at intervals is recommended and should be subject to agreement between the supplier and the purchaser.