

VÝSKUMNÝ ÚSTAV PAPIERA A CELULÓZY a.s.

PULP AND PAPER RESEARCH INSTITUTE Qualified laboratory of CEPI-CTS STN EN ISO 9001: 2009 Sekcia Lignotesting

Skúšobné laboratórium materiálov a produktov

Mechanical Testing Laboratory

TEST REPORT No. 00004/23 /2014





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Date of issue: July 4th 2014

Applicant/Customer: SEDASPORT s.r.o.

Staromyjavská 1031/14

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Test item: Chairs for ranked seating- folding model TORONTO

Registration number of the report of receipt of test item: 04 /23/2014

Date of delivery of test item: May 22nd 2014

Tests performed by:

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SCOPE

Range of tests was focused according to customer requirements: An assessment in accordance with STN EN 12227: 2002. Tab. No. 1, Type of use-general.

NAME OF THE TESTS

- Safety requirements for the product

The test procedure was performed in accordance with STN EN 12227: 2002: Furniture. Ranked seating. Test methods and requirements for strength and durability.

1. PURPOSE OF THE TEST

Verification of basic safety features, durability of construction and stability of the product.

2. TEST SAMPLE DELIVERY

The samples were delivered by the customer.



Fig.1: View of the packed folding seat TORONTO

3. DATE OF RECEIPT OF THE TEST ITEM

Subject of the test was delivered by client on May 22nd 2014. Report of receipt of test item: 04/23/2014 from May 22nd 2014.

4. SUBJECTS OF THE TESTS

Two pieces of folding seats TORONTO designed for ranked seating for stadiums and sports halls were delivered to the tests.



Fig.2: Folding seat TORONTO fixed to a panel.

Subject of the testing was made of the following materials:

- Steel anchor-leg R, L
- The construction consists of shaped steel tubes. Blue plastic seat and backrest are anchored by rivets to the construction.
- A finishing of metal parts is performed using powder paints.

5. ASSEMBLING

Chairs (TORONTO- 2 pieces) came individually packed. The samples N° 1 and N° 2 were anchored on the test panel according to the customer drawing.

6. START AND END DATES OF TESTS

Start date: May 23th 2014 End date: July 4th 2014

7. TEST PROCEDURE

The sample was tested in the Mechanical Testing Laboratory of accredited Laboratory of Materials and Products Testing, VÚPC, a.s., Bratislava, section Lignotesting in related laboratory conditions ϕ = 55 \pm 5% (relative humidity) and T = 23 \pm 2 °C (temperature). Certified and calibrated measuring instruments and test equipments – weights were used for the tests only.

List of test equipments and measuring instruments:

List of test equipments used:

Name of test equipment	Registration metrological number
Universal test equipment for test of durability and stability	SZ - 2.05/02
Universal test equipment for testing of furniture	SZ - 2.05/05
Test equipment for mass determination	SZ - 2.05/03



List of measuring instruments:

Name of instrument	Registration metrological number	Number of certificate
Measuring tape	DL - 01/23	0750/312.06/14
Weight	HM10,11,20,21,22,23,24,25, 26,27	027/220/12/13
Set loading pad	PSZ - 21/23	-

7.1 Safety requirements for the product

Subject of the testing is assembled on a horizontal pad and its evaluation according **STN EN 12727:2002** is provided.

7.2 Construction

The subject is placed on the floor. Overall checking of the completeness and compliance with security requirements for the construction of the chair for ranked seating are performed. All connections – welds are visually checked.

7.3 Edges, corners and tips

Tests of edges, corners and sharp tips are carried out visually on the test subject according to the requirements of standard **STN EN 12727: 2002.**

7.4 Weight of the chairs

Number of the test subject	Model	Weight	
04/23/2014/ 1	TORONTO	8,90 kg	
04/23/2014/ 2	TORONTO	8,90 kg	



Fig.3: Weighting of the sample TORONTO

8.1 Loading tests

N° of the test	Test	Loading	3		Type of	Evaluation
subject Use		General	Measured/Found	the test	Evaluation	
1	6.3. Seat and	Seat Force N	10 x 2000N	Without damage, cracks, fractures or release	AS	complied
TORONTO	Back Static Load Test	Back Force N	10 x 760N			
2	6.3. Seat and	Seat Force N	10 x 2000N	Without damage, cracks, fractures or release	AS	complied
TORONTO	Back Static Load Test	Back Force N	10 x 760N			

N° of the test	Test	Loading	3	Management/Found	Type of	Evaluation
subject	Use		General	Measured/Found	the test	Lvaluation
1 TORONTO	6.8. Combined Seat and Back Durability Test	Cycle Seat Force N	150 000 cycles 950N	Without damage, cracks, fractures or release	AS	complied
2 TORONTO	6.8. Combined Seat and Back Durability Test	Cycle Seat Force N	150 000 cycles 950N	Without damage, cracks, fractures or release	AS	complied



Fig 4: Testing of the seat

N° of the test subject Use	Test	Loading	3		Type of	
		General	Measured/Found	the test	Evaluation	
1 TORONTO	6.9. Seat Front Edge Durability Test	Cycle Seat Force N	150 000 cycles 950N	Without damage, cracks, fractures or release	AS	complied
2 TORONTO	6.9. Seat Front Edge Durability Test	Cycle Seat Force N	150 000 cycles 950N	Without damage, cracks, fractures or release	AS	complied





Fig.5, Fig.6: View of testing of the front edge of seats

N° of the test	Test	Loading	3	Measured/Found	Type of	Evoluation
subject	Use		General		the test	Evaluation
1 TORONTO	6.11. Seat Impact Test	drop height mm	300 mm x10 times	Without damage, cracks, fractures or release	AS	complied
2 TORONTO	6.11. Seat Impact Test	drop height mm	300 mm x10 times	Without damage, cracks, fractures or release	AS	<u>complied</u>

N° of the test	Test	Loading	3	Measured/Found Type of the test	Fuelvetion	
subject	Use		General			Evaluation
1 TORONTO	6.14. Tipping Seat Operation test	cycles	50 000	Without damage, cracks, fractures or release	AS	complied
2 TORONTO	6.14. Tipping Seat Operation test	cycles	50 000	Without damage, cracks, fractures or release	AS	<u>complied</u>





Fig.7, Fig.8: View of testing of the front edge of seats

Tests according to 6.13, 6.15 and 6.16 have not been carried out because no arms or auxiliary writing surface were parts of the testing subject.

Identification of the type of test:

AS – test in range of accreditation of testing laboratory of VÚPC a.s., section Lignotesting NS – test out of range of accreditation performed on own testing laboratory of VÚPC a.s., section Lignotesting

Note: Uncertainties of instruments and measurement were taken into account when an evaluation comes into force.

Warning: The test results do not replace any other documents required by the authorities of the state supervision in accordance with relevant regulations.

Copy sent to:

- 1. Customer
- 2. Laboratory of Materials and Products Testing Lignotesting

Auch



Ing. Vladimír Ihnát, PhD. Head of Laboratory of Materials and Products Testing



