

třída Tomáše Bati 299, Louky, 763 02 Zlín Czech Republic

### **Testing laboratory**

Testing laboratory \* Calibration laboratory \* Product certification body \* Quality management systems certification body \* Inspection organ \* Authorized body \* Notified body

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# **TEST REPORT** No. 412211071-01

Client:

The Mobile Chair - Evacuation Solutions from Buildings Ltd.

VAT No.: 515105922

Address:

Kibbutz Yehiam

P.O. 71 25125-00 Isreal

Sample:

Chair model E-400

Sample received on:

19.2.2020

Report elaborated by:

Ing. Martin Klepal

Place and date of isssue:

Zlín, 9.4.2020



Ing. Jiří Samsonek, Ph.D. Head of Testing Laboratory

Note: The results given in this Test Report apply only to the sample tested by our laboratory! Without a written consent by Institut pro testování a certifikaci, a.s. Zlín, the Test Report may not be reproduced unless as a whole!

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### Sample identification:

Table No.I Sample description and identification

ITC identification number	Sample identification by client	Description of submitted sample
412211071/01	Chair model E-400	Foldable evacuation chair



Picture No.1 delivered sample

#### Sampling method used:

The test sample was collected and supplied to the laboratory by the client. The laboratory is not responsible for this way of sampling.

#### Request:

Physical-mechanical tests according to ČSN EN 1865-4 Patient handling equipment used in road ambulances – Part 4: Foldable patient transfer chair

#### Test method:

- 1) General article 4.1
- 2) Dimensions article 4.2
- 3) Mass article 4.3
- 4) Loading capacity 4.4
- 5) Frame 4.5
- 6) Seat and backrest article 4.6
- 7) Restraint system article 4.7
- 8) Flammability article 4.8 and EN 1021-1
- 9) Deformation of the frame article 4.9 and EN 1865-1
- 10) Locking article 4.10
- 11) Deformation of the backrest lying- sitting area article 4.11 and EN 1865-1

### Test conditions:

Standard laboratory conditions (23±3)°C and (50±5)% Seat used for flammability test.



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### Place of testing:

The test was carried out at the workplace No. 2, třída Tomáše Bati 5264, Svit premises, building No. 113, 760 01 Zlín, Czech Republic

The laboratory is not responsible for information received from customer, which could have influence on the validity of the results. Further information required by the standard/standards and not given in this Test Report are available at a request at the Laboratory.

#### Test results:

Test results can be found in the following table.

#### Table No.II Test results

Article	Requirements	Test results	Evaluation
4.1 General	These chairs shall be fitted with a mechanism to assist the descent and/or ascent of steps in order to minimise the need for manual transportation of the patient and chair. When foldable patient transfer chairs are operated and maintained in accordance with manufacturer instructions, they should not present any high level of risk. Any identified risk shall be reduced to an acceptable level by using risk management principles in accordance with EN ISO 14971 in normal and single fault condition. Handles on devices shall lock in their extended positions. All equipment for the handling of patients shall be free of any sharp edges or deformation that could cause injury to persons or damage to other equipment. All patient restraint-systems shall have a quick release system. Patient restraint-systems shall secure the patient, but at the same time shall permit treatment of the patient.	The chair contains rolling tracks belts that span one or more steps to assist to ascent/descent steps. Handles locks to their extended positions. No sharp Edges on the sample. Restraint system has a quick release system.	Compliance



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4.2 Dimensions	The dimensions of the foldable patient transfer chair in open position shall be as follows:  The seat: minimum height of 300 mm, measured from the ground; maximum height of 550 mm, measured from the ground; minimum width of 330 mm; minimum depth of 350 mm;  The backrest: minimum height of 395 mm, measured from the seat; minimum width of 300 mm.	The seat height from the ground: 440 mm The seat width: 360 mm The seat depth 460 mm The backrest height measured from the seat: 410 mm The backrest width: 360 mm	Compliance
4.3 Mass	The mass shall be not more than 15 kg.	Weight of the chair : 13,3 kg	Compliance
4.4 Loading capacity	The loading capacity shall be a minimum of 150 kg.	The chair loaded with 150 kg weight.	Compliance
4.5 Frame	The frame of the foldable patient transfer chair shall be a sturdy, lightweight construction. It shall be furnished with 2 non-slip handles on the lower frame, and 2 non-slip handles on the top frame. It shall also have a footrest and a minimum of two wheels of a diameter 100 mm minimum at the rear. It shall be possible to store the foldable transfer chair in a folded position.	The frame is foldable, solid and light-weight construction. It is furnished with 2 non-slipping handles on the lower frame. It has a footrest and it has wheels of a diameter 100 mm at the rear. It is possible to store the chair in folded position by securing by restrain system.	Compliance
4.6 Seat and backrest	The patient seat and backrest shall be made of a strong material which is bacteria resistant, fungi resistant, stain resistant, putrid resistant, easy to clean, washable, waterproof and petrol-oil resistant.	The seat and backrest is made of strong material, easy to clean, detachable to wash, waterproof and petrol-oil resistant.	Compliance
4.7 Restrain system	There shall be at least two quick-release patient restraints.	The chair contains 1 quick release restrain and 1 hook and loop Velcro restraint.	Compliance
4.8 Flammability	There shall be no progressive smouldering or flaming ignition when tested in accordance with EN 1021-1.	See table No. III	Compliance
4.9 Deformation of the frame	There shall be no remaining deformation of the frame when	The chair loaded with 250 kg. No residual deformations observed.	Compliance



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	tested in accordance with EN 1865-1:2010, 5.8.1.		
4.10 Locking	The hinges and locks shall not open spontaneously or bend.	Locks need to be pushed in to release to fold the upper handles.	Compliance
4.11 Deformation of the backrest lying – sitting area	There shall be no remaining deformation of the backrest and lying-sitting area when tested in accordance with EN 1865-1:2010, 5.8.1.	The chair loaded with 250 kg. No residual deformations observed.	Compliance

Table No. III Flamability test- cover sheet + molitan (foam)

Measured value	Unit	Test result		
Source of ignition – glowing cigarette				
Smouldering		First cigarette	Second cigarette	
Burning time of the cigarette	s	479	691	
Unsafe escalating combustion	-	NO	NO	
Test assembly consumed		NO	NO	
Smoulders to extremities	-	NO	NO	
Smoulders through thickness	-	NO	NO	
Smoulders more than 1h	-	NO	NO	
In final examination, presence of active smouldering	-	NO	NO	
Flaming criteria				
Occurance of flames	-	NO	NO	
Extent of damage of the test assembly: - foam PUR (450 x 300 x 75)mm	mm	-	25 x 10(slight blackening)	
- foam PUR (450 x 150 x 75)mm	mm	20 x 10(slight blackening)	25 x 10(slight blackening)	
- Chair for stairs	mm	(22 - 25) x (8 - 14) Spot charring in contact with smoldering cigarette.	32 x (10 - 16) spot charring in contact with smolderir cigarette	

### Visual observation:

No tested sample ignited. Cigarettes finished in time stated in table No.III. Sample (cover sheet) is charred in spot with smoldering cigarette (both sides). Other layers (PUR foam) tested are almost non-destructed (slightly darker). During the test there was no glowing, smoldering or any combustion occured.

> M.Sc. Roman Dlabaja, Ph.D. Head of Laboratory of Physics