



**PAVUS, a.s.**

AUTHORIZED BODY 216  
NOTIFIED BODY 1391  
ACCREDITED CERTIFICATION BODY FOR  
PRODUCTS N° 3041

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## FIRE RESISTANCE CLASSIFICATION REPORT

The object of  
classification::

*Fire doors and shutters including their closing  
devices in accordance with  
ČSN EN 13501-2+A1:2010, clause 7.5.5*

Identification number:

**PK2-08-06-007-A-2**

Name and type of  
element:

*JAP 400 trap door, in a ceiling structure with suspended  
collapsible stair carriage »LUSSO PP or LSF«, heat stressed  
from the soffit side*

Sponsor:

*„J.A.P.“ spol. s r. o.  
Prerov III – Lovesice, house no. 67  
750 02 Prerov  
Czech Republic*

Issuing organization:

*PAVUS, a.s.  
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Notified Body 1391  
Accredited certification body for products N° 3041  
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## 1 INTRODUCTION

- 1.1 This classification report defines the resistance to fire classification assigned to element in accordance with the procedures given in EN 13501-2+A1.
- 1.2 This Classification Report has 5 pages and it can be used as a whole only.

## 2 DETAILS OF CLASSIFIED ELEMENT

### 2.1 General

Horizontal fire shutter – *JAP 400 trap door with suspended collapsible stair carriage LUSO PP or LSF* is defined as a fire shutter that has a role of fire-separating structure with regard to the characteristics of fire-resistance properties as stated in clause 5 of CSN EN 13501-2+A1.

### 2.2 Description

The classification subject is a horizontal fire shutter – *JAP 400 trap door with suspended collapsible stair carriage LUSO PP or LSF*, the fire shutter's external size being 700 x 1200 mm.

The assembly structure.

A frame of 1200 x 700 x 260 mm in size formed the supporting part of disappearing stairs. The steel frame was fitted with spruce grate (profiles of 70 x 30 mm in size) that was a part of the trap door lid.

Mineral felt ORSIL L, thick 30 mm (bulk density of 50 kg/m<sup>3</sup>). was used for thermally insulating pane. The trap door's upper part (unexposed side) jacketed with wood chipboard DTD thick 10 mm. All the wooden parts impregnated with water glass (made by LUKAPOL Lukavec).

The trap door jacketed from the soffit (thermally unexposed) side with SIBRAL Standard board thick 16 mm (bulk density of 300 kg/m<sup>3</sup>).

All the boards glued to the supporting frame with VSK – 120 cement (manufactured by KERAUNION, a. s. Dubi) and screwed to the supporting frame using 30 pieces of 4 x 30 mm bolts.

The complete sandwich structure is jacketed with galvanized sheet thick 0,6 mm, beplastered at its perimeter with intumescent tape INTERAM I - 10 thick 2 mm and wide 10 mm (imported by FRG).

Detailed description of the product with drawings can be found in the Test Report no. Pr-06-02.073 as of June 28, 2006.



### 3 TEST REPORTS / EXTENDED APPLICATION REPORTS AND TEST RESULTS IN SUPPORT OF THE CLASSIFICATION

#### 3.1 Test reports / extended application reports

Name of laboratory Address Accreditation	Name of sponsor	Test report No Date of issue	Test method
PAVUS, a. s. Veselí nad Lužnicí AZL No. 1026	„J. A. P.“ spol. s r. o. Přerov III – Lověšice č. p. 67 750 02 Přerov	Pr-06-2.073 2006-06-28	ČSN EN 1634-1

#### 3.2 Stress conditioning and tests results

Test method, Test report No Date of issue	Parametr
EN 1634-1 Pr-06-2.073 2006-06-28	Heat stress Direction of stress Number of the exposed sides Exertion of load Post system conditions
	<i>Standard temperature / time curve</i> <i>From the specimen's soffit side, that is, from under, from the side with hangers</i> 1 0 <i>Ferro-concrete panel of 2000 x 2500 x 150 mm in size, with o hole for fitting the specimen</i>
	<b>Integrity (E)</b> - cotton pad - gap gauges - sustained flaming
	70 minutes, no disruption 70 minutes, no disruption 70 minutes, no disruption
	<b>Insulation I<sub>1</sub></b> - average temperature - maximum temperature - maximum temperature – additional procedure - maximum temperature of doorframe 180 °C
	70 minutes, not exceeded 68 minutes, TC 26 23 minutes, TC 30 70 minutes, not exceeded
	<b>Insulation I<sub>2</sub></b> - average temperature - maximum temperature - maximum temperature of doorframe 360 °C
	70 minutes, not exceeded 68 minutes, TC 26 70 minutes, not exceeded
	<b>Radiation (W) &lt; 5 kW.m<sup>-2</sup> (not measured)</b> - 300 °C average temperature attainment time
	70 minutes, not exceeded

The sponsor did not give the primary gaps.

## 4 CLASSIFICATION AND FIELD OF APPLICATION

### 4.1 Reference of classification

This classification has been carried out in accordance with clauses 7 of EN 13501-2+A1.

### 4.2 Classification

This element is classified according to the following combinations of performance parameters and classes.

Classification from the soffit side, that is, from under, from the side with hangers.

**EI<sub>1</sub> 20 / EI<sub>2</sub> 60 / EW 60**

### 4.3 Field of application

The results of the fire test are directly applicable in accordance with EN 13501-2 and EN 1634-1 to similar construction where one or more of the changes listed below are made and the construction continues to comply with the appropriate design code for its stiffness and stability:

- the shutter's external size of 700 mm x 12000 mm (width x length), these dimensions can be reduced down to 50 % of width and 75 % of height, while, in smaller sizes, the position of the movement stopping members (hangers, locks, ...) must remain either the same as in the test or it must be limited by the identical percent decrease used for the shutter size reduction
- the number of the movement stopping means (locks, latch bolts, hangers) can be increased
- the number of the fastening means for the lid ⇔ manhole (door casing) can be increased, the distance between them can be reduced
- application is also possible for the fitting in different ceiling structure on the condition that the ferro-concrete panel's thickness is the same or greater than that of the ceiling structure the shutter was tested in
- application is also possible for the mounting in a different wall on the condition that the masonry's bulk density and thickness are the same or greater than those in the wall the shutter was tested in.



## 5 LIMITATIONS

This classification was extended based on the sponsor statement that neither production technology nor product components nor their suppliers have not been changed. It has also been extended based on the fact that there have not been any changes in test methodology through which the tests used for this classification had been carried out.

The classification applies for the shutters stressed by fire from the soffit side only, that is, from under, from the side with hangers.

This classification is valid, unless the conditions, under which it was issued, have been changed. The customer may request the issuing authority to review the influence of changes to the classification validity.

The duration of the validity of this classification report is 5 years of the issue date.

This classification report does not represent type approval or certification of the product.

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