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AUTHORIZED BODY 216

NOTIFIED BODY 1391

ACCREDITED CERTIFICATION BODY FOR PRODUCTS NO. 3041

Address:

Prosecká 412/74, CZ 190 00 Praha 9 - Prosek
Tel.: +420 286 019 587, E-mail: mail@pavus.cz
http://www.pavus.cz

Branch:

Fire Testing Laboratory Veselí nad Lužnicí
Čtvrť J. Hybeše 879, CZ 391 81 Veselí nad Lužnicí
Tel.: +420 381 477 418, E-mail: veseli@pavus.cz

CLASSIFICATION REPORT OF FIRE RESISTANCE

Subject of classification: *Fire doors and shutters
according to ČSN EN 13501-2:2017, art. 7.5.5*

Report No.:

PK2-08-12-020-E-2

Product name:

***Inspection door in shaft wall EI 120, FF System F5 EI 120
(exposed to heat on the outside of the shaft)***

Sponsor:

***FF Systembau GmbH
Hauptstraße 35
94439 Münchsdorf (Roßbach)
Germany***

Prepared by:

***PAVUS, a.s.
Accredited Certification body for products 3041
- accreditation issued by Czech Accreditation Institute, p. s. c.,
- Certificate of Accreditation No. 314/2021***

***Prosecká 412/74
190 00 Praha 9
Czech Republic***

Order No.: Z210220032 (Z210120218, Z210170331)

Date of issue:

2022-08-15

Copies in total:

2

Copy number:

1

Pages in total:

5

1 INTRODUCTION

- 1.1 This Classification Report defines the resistance to fire classification assigned to the given element "*The inspection door in shaft wall EI 120, FF System F5 EI 120*" in accordance with procedures given in ČSN EN 13501-2:2017.
- 1.2 This Classification Report consists of 5 pages and may only be used or reproduced in its entirety.
- 1.3 This Classification Report supersedes and cancels the Classification Report No. PK2-08-12-020-A-1 from November 16th, 2017.

2 DETAILS OF CLASSIFIED PRODUCT

2.1 General

The element - *The inspection door in shaft wall EI 120, FF System F5 EI 120* - is defined as non-loadbearing external wall. It has been designated as a fire separating construction with regard to its fire resistance parameters mentioned in art. 5 of ČSN EN 13501-2.

2.2 Description

The element of fire shutter composed of inspection door with dimensions of 200 x 200 mm and 1 000 x 1 500 mm mounted in non-loadbearing shaft wall (associated supporting construction) with total dimensions of 3 000 mm (width) x 3 000 mm (height) x 115 mm (thickness).

Inspection door:

The doors are manufactured from a peripheral frame welded from aluminium square of 29.9 x 27.5 x 2 mm, from GKF-boards of 12.5 mm in thickness (KNAUF) in two layers and from 1 back covering board Fireboard of 25 mm in thickness (KNAUF). The boards are at the periphery screwed to the frame using quick-driving screws TB 3.5x45 mm at a distance of 45 mm from the edge at a spacing of 106 mm for doors 200 x 200 mm and at a spacing of 181 mm and 176 mm for doors 1 000 x 1 500 mm. On the top edge, the door frame is provided with 2 locks (manufacturer FF Systembau) and on the bottom edge, at a distance of 80 mm from the edge. The door is provided with two aluminium conic plugs at a distance of 35 mm from the edge. On the aluminum square, at the door periphery, a sealing tape ROKU Strip L 110 (25x1 mm, Rolf Kuhn GmbH) is glued. At the lock point from the rear side of door, 2 chains with carbine are used as a retaining safety device. The chains are screwed to the top edge of door and to the wall frame.

Doors dimensions: 196.5 x 196.5 mm and 996.5 x 1 496.5 mm, thickness 50 mm.

The doors are mounted in a frame welded from aluminium square of 29.9 x 27.5 x 2 mm which was fixed in the wall construction to the GKF-boards strips 53 x 12.5 mm (KNAUF) in two layers and to the Fireboard stripes 28 x 15 mm (Quick-release screws TB 3.5x35 mm and TN 3.9x45 mm at a distance of 70 mm from the edge at a spacing of 135 mm for doors 200 x 200 mm and at a spacing of 162 mm and 164 mm for doors 1 000 x 1 500 mm). From the rear side, the frame is provided with two strips of Fireboard 26 x 25 mm and 50 x 25 mm. The strips of GKF-boards and Fireboards are fixed to the aluminium square and to CW-profile using quick-driving screws and steel pins (Quick-release screws TN 3.9x70 mm at a distance of 70 mm from the edge at a spacing of 135 mm for doors 200 x 200 mm and at a spacing of 162 mm and 164 mm for doors 1 000 x 1 500 mm). At the top edge, the frame is provided with 2 door catches with spring-loaded latches (of type Minilatch, manufacturer Haefele) and at the bottom edge, the frame is provided with 2 openings for the plugs. The strips in the gap with the door are provided with sealing tape ROKU Strip L 110 (12.5x1 mm, Rolf Kuhn GmbH) and Palusol of type 100 (25x2 mm) and in the connection with aluminium square, they are provided with sealing tape ROKU Strip L 110 (20x2 mm, Rolf Kuhn GmbH).

Shaft wall (associated supporting construction):

The loadbearing wall construction made of CW and UW profiles of 75 mm and with sheet metal thickness of 0.60 mm. Vertical CW profiles are mounted with basic axial spacing of 500 mm. The construction is sheathed from one side with gypsum boards GKF of 20 mm in thickness (KNAUF) in two layers (basic board dimension 2 000 x 1 250 mm). The boards are fixed to the CW and UW profiles using quick-driving screws with spacings of about 150 mm and the gaps are covered with joint filler UNIFLOT (KNAUF). The interior between CW and UW profiles is filled up with mineral wool Termarock 100 of 60 mm in thickness and of 100 kg/m³ in density (ROCKWOOL).

The shaft wall was anchored in the test frame using bottom and top UW profile and masonry screws with

spacings of about 400 mm.

The tested specimens was manufactured by company FF Systembau GmbH.

Detailed product description including drawings is documented in Test Report No. Pr-12-2.104 from December 7th, 2012.

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	Report No Date of issue	Test standard and date / field of extended application standards and dates
PAVUS, a.s. Veselí nad Lužnicí ATL No. 1026	FF Systembau GmbH Hauptstraße 35 94439 Münchsdorf Germany	Pr-12-2.104 2012-12-07	ČSN EN 1634-1:2000

3.2 Test results

Test method Report number Date of issue	Parameter	
ČSN EN 1634-1 Pr-12-2.104 2012-12-07	Fire scenario	Standard temperature / time curve
	Direction of fire exposure	Door opening into furnace (from the outer shaft side)
	Number of exposed faces	1
	Applied load	0
	Supporting construction	Associated supporting construction, both vertical edges unrestrained
	Inspection door 200 x 200	
	Integrity (E) - cotton pad ignition	125 minutes, no failure
	- cracks or opening exceeding the given limits	125 minutes, no failure
	- sustained flaming on the unexposed face	125 minutes, no failure
	Insulation (I₂) - average temperature	125 minutes, no failure
	- maximum temperature	125 minutes, no failure
	- door frame maximum temperature – rise of 360 °C	125 minutes, no failure
	Radiation (W) - heat flux < 5 kW.m ⁻² (not measured)	125 minutes, no failure
	Inspection door 1 000 x 1 500	
	Integrity (E) - cotton pad ignition	125 minutes, no failure
	- cracks or opening exceeding the given limits	125 minutes, no failure
	- sustained flaming on the unexposed face	125 minutes, no failure
	Insulation (I₂) - average temperature	125 minutes, no failure
	- maximum temperature	125 minutes, no failure
	- door frame maximum temperature – rise of 360 °C	125 minutes, no failure

Test method Report number Date of issue	Parameter	
	Radiation (W) was not measured - heat flux < 5 kW.m ⁻²	125 minutes, no failure

4 CLASSIFICATION AND FIELD OF APPLICATION

4.1 Reference of classification

This classification has been carried out in accordance with Clause 7.5.5 of ČSN EN 13501-2:2017.

Test was carried out in accordance with ČSN EN 1634-1:2000; test procedure and test conditions complied with requirements of ČSN EN 1634-1:2014 and ČSN EN 1634-1+A1:2019.

4.2 Classification

This element – *Inspection door in shaft wall EI-120, FF System F5 EI 120* - is classified according to the following combination of performance parameters and fire resistance classes:

E 120 / EI₂ 120 / EW 120

Applies to thermal stresses on the outside of the shaft.

4.3 Field of application

The fire resistance test results of element - *Inspection door in shaft wall EI 120, FF System F5 EI 120* - may be applied directly in accordance with ČSN EN 13501-2 and ČSN EN 1634-1+A1:

- materials and construction of the doorset shall be the same as those tested;
- number of leaves and the mode of operation shall not be changed;
- the type of metal shall not be changed from that tested;
- where the paint finish is not expected to contribute to the fire resistance of the door, alternative paints are acceptable and may be added to door leaves or frames for which unfinished test specimens were tested;
- decorative laminates and timber veneers up to 1.5 mm thickness may be added to the faces (but not the edges) of doors;
- the number of fixings per unit length used to attach doorsets to supporting constructions may be increased, but shall not be decreased and the distance between fixings may be reduced but shall not be increased;
- the number of hinges and dog bolts may be increased but shall not be decreased;
- the number of movement restrictors such as locks and latches is not covered by direct application;
- interchange of building hardware is not covered by the field of direct application;
- no increases in size are permitted;
- Maximum size of door leaf primary gaps:
 - Maximum size of vertical gap on the left side 4.0 mm
 - Maximum size of vertical gap on the right side 3.8 mm
 - Maximum size of top horizontal gap at the locks 3.9 mm
 - Maximum size of bottom horizontal gap at the plugs 4.0 mm
- The size of primary gap may be decreased;
- The fire resistance of a doorset tested in an associated supporting construction has no field of direct application. The applicability of the result to other supporting constructions shall be subject of extended application.

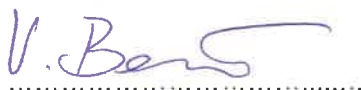
5 LIMITATIONS

This classification is valid unless the conditions, under which it was issued, have been changed (i.e., until the materials used, the composition or design of the product or the technical regulations relating to the product change).

The sponsor may request the issuing authority to review the influence of changes to the classification validity.

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

Prepared by:



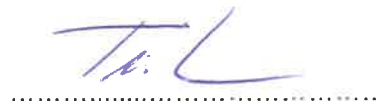
Vladimír BENEŠ
Fire Testing Laboratory

Reviewed by:



Petra CHLOUBOVÁ

Approved by:



Jan TRIPES

PAVUS, a.s.
Čtvrť J. Hybeše 879
391 81 Veselí nad Lužnicí
IČ: 60193174; DIČ: CZ60193174
(9)



