

PAVUS, a.s.
AUTHORIZED BODY 216

NOTIFIED BODY 1391
ACCREDITED CERTIFICATION BODY FOR PRODUCT CERTIFICATION NO. 3041

Branch:

FIRE TESTING LABORATORY VESELÍ NAD LUŽNICÍ Čtvrť J. Hybeše 879

391 81 Veselí nad Lužnicí

Registered office:

Prosecká 412/74, 190 00 Prague 9 – Prosek Phone: 286 019 587 Fax: 286 019 590 E-mail: mail@pavus.cz, http://www.pavus.cz Phone: 381 477 418 Fax: 381 477 419 E-mail: veseli@pavus.cz

# FIRE RESISTANCE CLASSIFICATION REPORT

Object of classification: Non-loadbearing walls in accordance with

ČSN EN 13501-2:2016, cl. 7.5.2

Identification number:

PK2-05-15-901-E-2

Name and type of

element:

Glass concrete wall made of glass bricks 1919/8 Wave

Sponsor:

VITRABLOK, s.r.o.

Bílinská 42

419 14 Duchcov Czech Republic

Issuing organization:

PAVUS, a.s.

Authorized body AO 216

Notified body 1391

Accredited certification body for products No. 3041
- Accreditation issued by Czech Accreditation Institute,

Public Service Company,

Certificate of Accreditation No. 353/2016

Prosecká 412/74 190 00 PRAGUE 9

Order No. Z220170106 (515094 / Z220150205)

Date of issue:

2017-04-04

Copies in total:

1

Copy number:

1

Pages in total:

4



#### 1. INTRODUCTION

- 1.1. This Classification Report defines the resistance to fire classification assigned to the given element in accordance with procedures given in ČSN EN 13501-2: 2016.
- 1.2. This Classification Report includes 4 pages and may only be used or reproduced in its entirety.
- 1.3. This classification report supersedes Classification Report No. PK2-05-15-901-E-1 from the 14<sup>th</sup> March 2017.

#### 2. DETAILED INFORMATION ON CLASSIFIED PRODUCT

#### 2.1. General

Glass concrete wall made of glass bricks 1919/8 Wave has been defined as an element on non-loadbearing construction. It has been designated as a fire separating construction with regard to its fire resistance parameters mentioned in cl. 5 of ČSN EN 13501-2.

#### 2.2. Description

- ♦ Prefabricated glass concrete wall symetrical construction with dimensions of 2970 x 2970 x 80 mm
- ◆ Loadbearing reinforced concrete frame, width of rib between the glass blocks 15 mm, width of peripheral wall frame 55 mm, C16/20 concrete, B500B reinforcement in the vertical rib and frame 2x Ø 6 mm at the edges and in horizontal rib and frame 1x Ø 6 mm in axis
- ♦ Clear hollow glass blocks of 1919/8 Wave type with a ripple with dimensions of 190 x 190 x 80 mm (196 pcs in total), thickness of the glass of exposed block surface 6,6 mm
- ♦ The wall is anchored on upper edge with chasing nuts with the screw M10 x 40 mm and 2 pieces of steel plate 70 x 180 x 3 mm with distance of 1610 mm and 2x 2 pieces of screws into masonry 7,4 x 80 mm, laterals and bottom edges of wall without anchors (tested variant)
- ♦ The wall periphery sealed with ceramic wool strips Cerablanket 1260 °C (100 kg/m3) of 110 mm in width with a total thickness of about 20 mm.

Manufacturer of the tested specimen: company SBP International s.r.o., Chotusice, Czech Republic.

For a detailed product description including drawings see Test Report No. *Pr-12-2.105 from October 15<sup>th</sup> 2012.* 



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

#### 3.1. Test reports / extended application reports

Name of laboratory Address Accreditation number	Sponsor of the Test Report	Report number Date of issue	Test method
PAVUS, a. s. Veselí nad Lužnicí ATL No. 1026	VITRABLOK, s.r.o. Bílinská 42 419 14 Duchcov Czech Republic	Pr-12-2.105 2012-10-15	ČSN EN 1364-1: 2000

#### 3.2. Stress conditions and test results

Test method, Report number, Date of issue	Parameter	
ČSN EN 1364-1 Pr-12-2.105 2012-10-15	Fire scenario Direction of fire exposure Applied load Supporting conditions	Standard temperature / time curve Symmetrical construction - Mounted in building opening from bricks YTONG P2-550 thickness of 250 mm, upper side anchored in test frame, both vertical and bottom sides unrestrained
	Integrity (E) - cotton pad ignition - cracks or openings in excess of given limits - sustained flaming on unexposed face	70 minutes, no failure 70 minutes, no failure 70 minutes, no failure
	Insulation (I) - average temperature - maximum temperature  Radiation (W) - reach 15 kW.m <sup>-2</sup>	15 minutes 13 minutes 46 minutes

#### 4. CLASSIFICATION AND FIELD OF APPLICATION

#### 4.1. Reference

This classification has been carried out in accordance with ČSN EN 13501-2: 2016 cl. 7.

The test was carried out according to ČSN EN 1364-1:2000; test procedures and conditions met the requirements of ČSN EN 1364-1:2015.



#### 4.2. Classification

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

### E 60 / EW 30 / EW 45\*)

\*) The classification EW 45 was reached beyond the classification classes given in ČSN EN 13501-2: 2016.

#### 4.3. Field of direct application

The fire resistance test results can be applied directly to similar construction – in accordance with ČSN EN 13501-2+A1 and ČSN EN 1364-1 – where one or more changes listed below are made and the construction continues to comply with the appropriate design code for its stiffness and stability:

- decrease of a dimensions of glass brick, not including thickness;
- decrease in distance of fixing centres;
- increase the height is not allowed;
- the width of identical construction can be increased;
- using of any other supporting construction within the same type (low density rigid), that has a greater fire resistance (higher thickness, density).

#### 5. LIMITATIONS

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

The validity of this classification report is limited for 5 years after the date of issue.

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

Elaborated by:

Checked by:

Approved by:

Ing. Zdeňka STARÁ

Ing. Jana BUCHTOVÁ

Ing. Jaroslav DUFE

PAVUS, a.s.
Prosecká 412/74, 190 00 Praha 9
IČ: 60193174; DIČ: CZ60193174
(4)