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CLASSIFICATION REPORT

Nr.: PKP-20-149
(Revalidation PKO-16-006/AO 204)

Product name and type:

Wall 160 mm thick of glass blocks type „Seves Glassblock 1919/16 60F“

Order number: **Z080200116**

Registration number: **080-023791**

Customer: **Vitrablok s.r.o.**
Bílinská 782/42
419 01 Duchcov



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1 Introduction

- 1.1 This Classification Report determines the classification of the given element in conformity with procedures given in ČSN EN 13501-2: 2017.
- 1.2 This Classification Report contains 5 text pages and may be used as a whole only.

2 Documents

2.1 Standards

- ČSN EN 13501-2: 2017: Fire classification of construction products and building elements – Part 2: Classification using data from fire resistance tests, excluding ventilation services
- ČSN EN 1364-1: 2000: Fire resistance tests for non-loadbearing elements – Part 1: Walls
- ČSN EN 1364-1: 2017: Fire resistance tests for non-loadbearing elements – Part 1: Walls

2.2 Test reports

- (3683/748/09) -TM of 21/04/2009

3 Detailed information on the classified element

3.1 General

Non-loadbearing wall thick 160 mm of glass blocks type „Seves Glassblock 1919/16 60F“ is defined as an element of non-loadbearing structure. It has to fulfill the function of a fire dividing structure with regard to the fire characteristics of the properties specified in Article 5 (ČSN) EN 13501-2: 2017.

3.2 Description

Elemental information

The wall construction consists of glass blocks of the „Seves Glassblock 1919/16 60F“ type with a thickness of 160 mm (according to DIN 18175), the joints and walling are made of thermal insulation mortar.

The dimensions of the test sample were 2960 mm x 2960 mm (width x height).

Construction of glass blocks

The dimensions of glass blocks with the trade name „Seves Glassblock 1919/16 60F“ are 190 mm x 190 mm x 160 mm. Block wall is 12 mm thick, the edge is 10 mm width. Against the wall edges is the block edge set-off by 3 mm, thus creating a shallow mortar pocket (see drawings – Annex N° 1.3 of the Test Report (3683/748/09)-TM of 2009-04-21).

The block 160 mm thick consists of two together glued blocks, 80 mm thick.

Joints and facing

In joints and facing has been used the „LM21“ thermally insulating mortar.

Joints between the blocks are approximately 15 mm wide. The infill is on both sides set-off approximately by 2 mm against the glass surface.

The facing is along the whole perimeter approx. 55 mm wide and 160 mm thick.

Reinforcement

The facing is reinforced with 3 steel bars Ø 8 mm (steel BSt 500 S). The reinforcement is installed at both faces and in the middle of the facing.

Each horizontal joint between the blocks are reinforced with 3 steel bars Ø 6 mm (steel BSt 500 S). Every second vertical joint between the blocks is reinforced with 2 steel bars Ø 6 mm



(steel BSt 500 S), extending into the facing reinforcement, see Annex N° 1.2 of the Test Report (3683/748/09)-TM of 2009-04-21).

The reinforcement rods are at the crossing points not tied together.

Installation in the brickwork

For easy transport are on the top of each Ø 10 mm reinforcing bar (steel BSt 500 S) welded two threaded sleeves M12.

Fixing in the rigid supporting construction (thickness, density and fire resistance at least identical with the tested construction) is provided in the top part with steel mounting plates 50 mm x 8 mm x 200 mm, anchored by two hexagonal screws M10 x 35 mm, screwed into M12 threaded sleeves. At the ends is the fixing provided with two Fischer S 12 anchors and two 100 long hexagonal screws Ø 10 mm, see Annex N° 1.1 of the Test Report (3683/748/09)-TM of 2009-04-21).

Joint between the brickwork (rigid supporting construction) and facing may be supplementary sealed with mineral wool (reaction to fire A1).

Detailed description of the product, drawings inklusive, is given in the Test Report (3683/748/09) – TM of 2009-04-21).

4. Test Reports and test results used for this Classification

4.1. Test Reports / Extended Application Reports

| Nr. | Order party of the Test Report | Laboratory name Adress Accreditation number | Report number Date of issue | Test procedure |
|------------|---|---|--|------------------------|
| [1] | SEVES S.p.A. Via Reginaldo Giuliani – 360 50141 Firenze, Italia | iBMB MPA TU Braunschweig, Německo DAP-PL-2204.01, 02, 03, 04, 05 | (3683/748/09) – TM of 21-04-2009 | DIN EN 1364-1: 1999 |

4.2 Fire Resistance Test Results

| Test procedure Report number Date of issue | Parameter | |
|--|--|---|
| [1] DIN EN 1364-1: 1999 (3683/748/09) – TM of 21-04- 2009 | Thermal stress Stress direction Dimensions of the tested construction Supporting conditions | Standard time / temperature curve Symmetrical wall 2960 mm (width) x 2960 (length) One free edge |
| | Integrity (E) - cotton pad - cracks, openings - substained flaming | > 66 minutes > 66 minutes > 66 minutes |
| | Insulation (I) - average temperature - maximum temperature | > 66 minutes > 66 minutes |
| | Radiation (W) < 5 kW.m⁻² | > 66 minutes |



5. Classification and the field of application

5.1. Reference

This Classification was carried out in accordance with ČSN EN 13501-2, čl. 7. Tests made out in accordance with EN 1364-1: 2000 met the requirements EN 1364-1: 2015. The test was performed according to (ČSN) EN 1364-1: 2000; the test procedure and test conditions met the requirements of EN 1364-1: 2015, ČSN EN 1364-1: 2017. The change is only in the location of the measuring point to obtain the maximum temperature in the middle of the height of the free edge 150 mm from the edge exp. sample (see ČSN EN 1364-1: 2017, chap. 9.1.2.3), compared to 100 mm from the edge according to the standard from 2000, the change of location 50 mm is on safety side.

5.2. Classification

This element has been classified according to the following parameters of properties and fire resistance classes.

EI 60 / EW 60

5.3. Field of application

Fire test results of the specimen – Non-loadbearing wall th. 160 mm of glass blocks type „Seves Glassblock 1919/16 60F“– can be directly applied in accordance with ČSN EN 13501-2 and ČSN EN 1364-1 to the same structures for which one or more of the change listed below have been made and which are such that the structure continues to comply with the relevant standard due to its rigidity and stability:

- Fire resistance of a non-loadbearing wall tested in a rigid supporting structure with low density according to EN 1364-1 can be applied to a non-loadbearing wall installed in the same way in walls with same or greater density and thickness than with which it was tested

It is not allowed to increase the wall height compared to the test (according to ČSN EN 1364-1).

It is not allowed to increase the wall width compared to the test (according to ČSN EN 1364-1 and (3701/5955 -Mp dd. 15-08-2005).



6. Validity of the Classification report

This Classification report is valid up to **2025-12-13**, provided the product or standard provisions will not be changed

Declaration:

This Classification Report is valid as a whole only, while each and every page shall be provided with the Classification Report identification number, page number from the total number of pages, and with the compiler stamp. This Classification Report does not substitute either the type approval or the product certification.

, číslem strany z celkového počtu stran a razítkem zhotovitele. Tento Protokol o klasifikaci nenahrazuje schválení typu ani certifikaci výrobku.



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