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Branch 0800 – PBS

CLASSIFICATION REPORT

Nr.: PKP-20-148

(Revalidation PKO-16-005/AO 204)

Product name and type:

Wall 80 mm thick of glass blocks type „Seves Glassblock 1919/8 30F“

Order number: **Z080200116**

Registration number: **080-023790**

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

- 3701/5955-Mp dd. 15-08-2005

3 Detailed information on the classified element

3.1 General

Non-loadbearing wall thick 80 mm of glass blocks type „Seves Glassblock 1919/8 30F“ 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 1919/8 30F“ type with a thickness of 80 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

Glass blocks with trade name „Seves Glassblock 1919/8 30F“ have dimensions of 190 mm x 190 mm x 80 mm. The wall of the block is 20 mm thick and the edge part is 12 mm wide. The edge part is offset by 3 mm from the edges of the wall, which creates a shallow mortar pocket (drawing documentation – see annex No. 3 of test report 3701/5955– Mp- dd. 15-08-2005).

In the middle of the glass block, the adhesive „PACTAN 3040“ (Heidelberger Bausofftechnik, Germany) glues float flat glass „PLANITHERM“ with a coating (Vegla, Germany) with a thickness of 4 mm (see Annex No. 3 of test report 3701/5955-Mp- dd. 15-08-2005).

Joints and walling

Insulating mortar „LM21“ is used in the joints and in the lining.

Joints between the blocks are about 15 mm wide. The filling on both sides is offset by approx. 2 mm compared to the glass surface.

The walling has a width of about 55 mm and a thickness of 80 mm around the entire perimeter.

Reinforcement



Reinforcement is inserted in the walling – 2 steel bars Ø 8 mm (steel BSt 500 S). The reinforcement is fitted at the faces of the wall.

Each horizontal joint between the blocks is reinforced at each wall face with one steel bar Ø 6 mm (steel BSt 500 S). Every second vertical joint between the blocks is reinforced with one steel bar Ø 6 mm (steel BSt 500 S) extending into the reinforcement of the wall; bar is inserted alternately at the outer and inner face of the wall. See Annex No. 2 of the test report (3701/5955) – Mp dd. 15-08-2005).

The reinforcement bars are not tied together with wire at the points of intersection.

Mounting in the walling and transport hooks

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

Mounting in a rigid supporting structure (thickness, density, fire resistance at least identical to the tested structure) is made in the upper part using steel mounting plates 50 mm x 8 mm x 200 mm, which are fixed by two hexagonal screws M10 x 35 mm screwed into threaded sleeves M12. At the ends, the mounting is made with two S12 Fischer anchors and two hexagon bolts Ø 10 mm and length 100 mm. See Annex No. 1 of the test report (3701/5955) – Mp dd. 15-08-2005).

The joint between the lining (rigid supporting structure) and the walling is eventually sealed with mineral wool (reaction to fire A1).

A detailed description of the product, including drawings, is given in the test report (3701/5955) – Mp dd. 15-08-2005).

4. Test Reports and test results used for this Classification

4.1. Fire Resistance Test Reports / Extended Application Reports

Nr.	Order party of the Test Report	Laboratory name Address 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	3701/5955-Mp- dd. 15-08-2005	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 3701/5955-Mp- dd. 15-08-2005	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	36 minutes 36 minutes 36 minutes



	Insulation (I) - average temperature - maximum temperature	36 minutes 36 minutes
	Radiation (W) < 5 kW.m⁻²	36 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 30 / EW 30

5.3. Field of application

Fire test results of the specimen – Non-loadbearing wall th. 80 mm of glass blocks type „Seves Glassblock 1919/8 30F“ – 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.



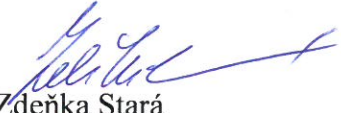
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Prague, 2020-12-14