Warsaw, 2024.03.08

Refers to 00970/24/Z00NZP

STAREN Wyłazy Dachowe Stanisław Fuksa
ul. Zamenhofa 9
38- 500 Sanok

Supplementary Classification of fire resistance of roof hatchways

OMEGA PS Termo EI

to classification report 00715/12/Z00NP.

1. Formal basics

1.1. Order from STAREN Wyłazy Dachowe Stanisław Fuksa of 1 March 2024.

1.2. Confirmation of the order 00970/24/Z00NZP.

2. Founded thematic basis

2.1. PN-EN 13501-2; 2016-07 Fire classification of construction products and building elements Part 2: Classification on the basis of fire resistance tests results, excluding ventilation.

2.2. PN-EN 1634-1+A1:2018-03 Fire resistance research and smoke tightness of door assemblies, window assemblies, blinds assemblies, openable windows and elements of construction fittings – Part 1: Fire resistance research and smoke tightness of door assemblies, window assemblies, blinds assemblies, openable windows.

2.3. Report of The Fire Research Laboratory of the Institute of Building Technology from fire resistance tests No. LPP00-2077/12/Z00NP/z.

2.4. Classification report of the Department of Fire Research Institute of Building Technology No. 00715/12/Z00NP.

2.5. Supplementary Classification of the Department of Fire Research Institute of Building Technology No. 00715.1/12/Z00NP.

2.6. Supplementary Classification of the Department of Fire Research Institute of Building Technology No. 1182/15/Z00NP.

2.7. Supplementary Classification of the Department of Fire Research Institute of Building Technology No. 01613/18/Z00NP.

3. Classification of fire resistance

3.1. Roof hatches OMEGA PS Termo EI (Item 1)

3.1.1. Fire resistance of roof hatchways OMEGA PS Termo EI (Item 1) carried out in accordance with the technical description set out in clause 2.2.1. in the classification Report of the Department of Fire Research Institute of Building Technology 00715/12/Z00NP number [2.4], mounted on ring beam quadrilateral closed with construction:

- Bricked with cellular concrete blocks, ceramic bricks or full silicate, of a thickness not less than 120 mm, the density not less than 600 kg/m^3 and a height not more than 240 mm,
- Concrete or framed concrete with a thickness of not less than 120 mm, raised on the bricked structures elements, concrete or framed concrete with a minimum fire resistance class REI 15, effected with fire from bottom (the side opposite to the hinge), according to standard criteria norm PN- EN 13501-2: 2016-07 [2.1] – EI_1 15.

3.1.2. Fire resistance of roof hatchways OMEGA PS Termo EI (Item 1) carried out in accordance with the technical description set out in clause 2.2.1. in the classification Report of the Department of Fire Research Institute Building Technology 00715/12/Z00NP number [2.4], mounted on ring beam quadrilateral closed with construction:

- Bricked with cellular concrete blocks, ceramic bricks or full silicate, of a thickness not less than 120 mm, the density not less than 600 kg/m^3 and a height not more than 240 mm,
- Concrete or framed concrete with a thickness of not less than 120 mm, raised on the bricked structures elements, concrete or framed concrete with a minimum fire resistance class REI 20, effected with fire from bottom (the side opposite to the hinge), according to standard criteria norm PN- EN 13501-2: 2016-07 [2.1] – EI_1 20.

3.1.3. Fire resistance of roof hatchways OMEGA PS Termo EI (Item 1) carried out in accordance with the technical description set out in clause 2.2.1. in the classification Report of the Department of Fire Research Institute Building Technology 00715/12/Z00NP number [2.4], mounted on ring beam quadrilateral closed with construction:

- Bricked with cellular concrete blocks, ceramic bricks or full silicate, of a thickness not less than 120 mm, the density not less than 600 kg/m^3 and a height not more than 240 mm,
- Concrete or framed concrete with a thickness of not less than 120 mm, raised on the bricked structures elements, concrete or framed concrete with a minimum fire resistance class REI 30, effected with fire from bottom (the side opposite to the hinge), according to standard criteria norm PN- EN 13501-2: 2016-07 [2.1] – EI_1 30.

3.1.4. Fire resistance of roof hatchways OMEGA PS Termo EI (Item 1) carried out in accordance with the technical description set out in clause 2.2.1. in the classification Report of the Department of Fire Research Institute Building Technology 00715/12/Z00NP number [2.4], mounted on ring beam quadrilateral closed with construction:

- Bricked with cellular concrete blocks, ceramic bricks or full silicate, of a thickness not less than 150 mm, the density not less than 600 kg/m^3 and a height not more than 240mm,
- Concrete or framed concrete with a thickness of not less than 150 mm, raised on the bricked structures elements, concrete or framed concrete with a minimum fire resistance class REI 60, effected with fire from bottom (the side opposite to the hinge), according to standard criteria norm PN- EN 13501-2: 2016-07 [2.1] – EI_2 60.

3.1.5. Fire resistance of roof hatchways OMEGA PS Termo EI (Item 1) carried out in accordance with the technical description set out in clause 2.2.1. in the classification Report of the Department of Fire Research Institute Building Technology 00715/12/Z00NP number [2.3], mounted on ring beam quadrilateral closed with construction:

- Bricked with cellular concrete blocks, ceramic bricks or full silicate, of a thickness not less than 180 mm, the density not less than 600 kg/m^3 and a height not more than 240mm,
- Concrete or framed concrete with a thickness of not less than 180 mm, raised on the bricked structures elements, concrete or framed concrete with a minimum fire resistance

class REI 90, effected with fire from bottom (the side opposite to the hinge), according to standard criteria norm PN- EN 13501-2: 2016-07 [2.1] – EI_2 90.

3.2. Roof hatches OMEGA PS Termo EI (Item 2)

3.2.1. Fire resistance of roof hatchways OMEGA PS Termo EI (Item 2) carried out in accordance with the technical description set out in clause 2.2.2. in the classification Report of the Department of Fire Research Institute Building Technology 00715/12/Z00NP number [2.4], mounted on ring beam quadrilateral closed with construction:

- Bricked with cellular concrete blocks, ceramic bricks or full silicate, of a thickness not less than 120 mm, the density not less than 600 kg/m^3 and a height not more than 240 mm,
- Concrete or framed concrete with a thickness of not less than 120 mm, raised on the bricked structures elements, concrete or framed concrete with a minimum fire resistance class REI 15, **effected with fire from bottom (the side opposite to the hinge)**, according to standard criteria norm PN- EN 13501-2: 2016-07 [2.1] – EI_1 15.

3.2.2. Fire resistance of roof hatchways OMEGA PS Termo EI (Item 2) carried out in accordance with the technical description set out in clause 2.2.2. in the classification Report of the Department of Fire Research Institute Building Technology 00715/12/Z00NP number [2.4], mounted on ring beam quadrilateral closed with construction:

- Bricked with cellular concrete blocks, ceramic bricks or full silicate, of a thickness not less than 120 mm, the density not less than 600 kg/m^3 and a height not more than 240mm,
- Concrete or framed concrete with a thickness of not less than 120 mm, raised on the bricked structures elements, concrete or framed concrete with a minimum fire resistance class REI 20, **effected with fire from bottom (the side opposite to the hinge)**, according to standard criteria norm PN- EN 13501-2: 2016-07 [2.1] – EI_1 20.

3.2.3. Fire resistance of roof hatchways OMEGA PS Termo EI (Item 2) carried out in accordance with the technical description set out in clause 2.2.2. in the classification Report of the Department of Fire Research Institute Building Technology 00715/12/Z00NP number [2.4], mounted on ring beam quadrilateral closed with construction:

- Bricked with cellular concrete blocks, ceramic bricks or full silicate, of a thickness not less than 120 mm, the density not less than 600 kg/m^3 and a height not more than 240mm,

- Concrete or framed concrete with a thickness of not less than 120 mm, raised on the bricked structures elements, concrete or framed concrete with a minimum fire resistance class REI 30, effected with fire from bottom (the side opposite to the hinge), according to standard criteria norm PN- EN 13501-2: 2016-07 [2.1] – EI_1 30.

3.2.4. Fire resistance of roof hatchways OMEGA PS Termo EI (Item 2) carried out in accordance with the technical description set out in clause 2.2.2. in the classification Report of the Department of Fire Research Institute Building Technology 00715/12/Z00NP number [2.4], mounted on ring beam quadrilateral closed with construction:

- Bricked with cellular concrete blocks, ceramic bricks or full silicate, of a thickness not less than 150 mm, the density not less than 600 kg/m^3 and a height not more than 240mm,
- Concrete or framed concrete with a thickness of not less than 150 mm, raised on the bricked structures elements, concrete or framed concrete with a minimum fire resistance class REI 60, effected with fire from bottom (the side opposite to the hinge), according to standard criteria norm PN- EN 13501-2: 2016-07 [2.1] – EI_2 60.

3.2.5. Fire resistance of roof hatchways OMEGA PS Termo EI (Item 2) carried out in accordance with the technical description set out in clause 2.2.2. in the classification Report of the Department of Fire Research Institute Building Technology 00715/12/Z00NP number [2.4], mounted on ring beam quadrilateral closed with construction:

- Bricked with cellular concrete blocks, ceramic bricks or full silicate, of a thickness not less than 180 mm, the density not less than 600 kg/m^3 and a height not more than 240mm,
- Concrete or framed concrete with a thickness of not less than 180 mm, raised on the bricked structures elements, concrete or framed concrete with a minimum fire resistance class REI 90, effected with fire from bottom (the side opposite to the hinge), according to standard criteria norm PN- EN 13501-2: 2016-07 [2.1] – EI_2 90.

4. The scope of the classification of fire resistance

Given in section 3 classification of fire resistance is important for below the specified range of applications.

4.1. The number of fasteners used to attach the frame to the mounting structure can be increased, but should not be reduced, and the distance between switches can be reduced, but not increased.

4.2. The number of elements of building fittings for the reduction of movement such as locks, handles and hinges, can be increased, but not decreased.

4.3. The thickness of the hatchway's metal sheet cover can be increased not more than by 50%. The type of metal cannot be changed.

4.4. The shape formed by metal sheet cover can be changed but only in a way causing changes in the area occupied by polyurethane, and so that after closing the hatchway wing view of the exterior of the frame and its base has not changed. The shape of the wing roof access window formed by metal plating may be rectangular in accordance with Pic. 1, Pic. 2 and Pic. 3.

4.5. The thickness of the frame's metal sheet, it's base and the cross-sectional dimensions of them can be increased not more than by 25%. kinds of these metal elements cannot be changed.

4.6. Thickness of other metal sheet than those listed in section 4.3 and 4.5, ie metal sheets of elements located on the opposite side to the hinge can be increased by not more than 50%.

4.7. You can use painted steel sheets, coated and laminated except stainless steel sheet. Metal type should not be changed.

4.8. Classification given in section 3 applies to roof hatchways OMEGA PS Termo EI (Item 1) Omega PS Termo El (Item 2) in the following range of dimensions (in the light of the frame):

- Width 400mm – 1000mm
- Length 200mm – 1000mm

5. Validity and final remarks

The classification given in Section 3 is valid until May 23, 2027 on condition that in the roof hatchways' solutions will not be introduced changes in materials or construction in a greater scope than those specified in Section 4.

The validity of the classification may be renewed for further periods, if the applicant or formal successor occurs in this case to the Building Research Institute an appropriate application not later than before the expiration of this document.

Developed by: mgr inż. Daniel Izydorczyk (*electronic signature*)

Verified by: dr inż. Paweł Sulik (*electronic signature*)

Approved: dr inż. Bartłomiej Papis - Head of the Fire Research Department of ITB (*electronic signature*)