Protocol number: 290-09122
Document number: 03-04CR/22
Date: 30/09/2022

CLASSIFICATION REPORT

tested sample on fire resistance for loadbearing elements, roof product: Trapezoidal steel profile 153 + PIR Insulation 100mm (Thermocomfort) + PVC membrane 1,2 mm, type: "Insulated roof assembly", thickness 254,2 mm, with steel profile 0.88mm on the bottom side, according to BAS EN 1365-2: 2015 - Fire resistance tests for loadbearing elements - Part 2: Floors and roofs

03-04CR/22

CLASSIFICATION OF FIRE RESISTANCE IN ACCORDANCE WITH BAS EN 13501-2: 2017

Customer:	Joris Ide Buziaș, Strada Principală 58, Buziaș 305100, Romania
Issued by:	"Istraživačko razvojni centar„ d.o.o. Istočno Sarajevo – „INZA lab" - Ispitna laboratorija, Vitomira Lukica 12a, 71000 Sarajevo
Product name:	Trapezoidal steel profile 153 + PIR Insulation 100mm (Thermocomfort) + PVC membrane 1,2 mm
Product type:	"Topterm ZP 100 RW"
Classification report No.:	03-04CR/22
Issue date:	30/09/2022
Basis	BAS EN 1365-2:2015 Fire resistance tests for loadbearing elements - Part 2: Floors and roofs BAS EN 13501-2:2017- Fire classification of construction products and building elements - Part 2: Classification using data from fire resistance tests, excluding ventilation services
Instructions for use	This Fire Resistance classification report defines the classification of a building element element through the product designation in accordance with the methods specified in BAS EN 13501-2: 2017. This document is not a type approval, nor is it a certification.
Validity	The given data and results refer only to the tested and described sample.
Content	The report consists a total of 6 pages.

Technical Manager of laboratory

Senid Osmanković, MA Mech. Eng.

«IRC» d.o.o. Društvo sa ograničenom odgovornošću «Istraživačko razvojni Centar» I.Sarajevo

Manager of laboratory

Senad Džanko, El. Eng

BAS EN ISO/IEC 17025 BATA ACCREDITATION LI-35-01

1 Introduction

This classification report defines the classification of fire resistance assigned to the building element: for loadbearing elements, roof product: Trapezoidal steel profile 153 + PIR Insulation 100mm (Thermocomfort) + PVC membrane 1,2 mm, type: "Insulated roof assembly", thickness 254,2 mm, with steel profile 0.88mm on the bottom side, manufacturer Joris Ide Buziaș, Strada Principală 58, Buziaș 305100, Romania, based on the Testing Report, **broj 03-22/22** of 30/09/2022, issued by „Istraživačko razvojni centar" d.o.o. Istočno Sarajevo - "INZA lab"- Ispitna laboratorija, Vitomira Lukica 12a, 71000 Sarajevo, in accordance with the procedures defined in the standard BAS EN 13501-2: 2017.

2 Basic information on the classified product

2.1 General

The building element: for loadbearing elements, roof product: Trapezoidal steel profile 153 + PIR Insulation 100mm (Thermocomfort) + PVC membrane 1,2 mm, type: "Insulated roof assembly", thickness 254,2 mm, with steel profile 0.88mm on the bottom side, manufacturer Joris Ide Buziaș, Strada Principală 58, Buziaș 305100, Romania, is defined in accordance with the procedures as a compact wall of fire resistance.

2.2 Product description

Building element: for loadbearing elements, roof product: Trapezoidal steel profile 153 + PIR Insulation 100mm (Thermocomfort) + PVC membrane 1,2 mm, type: "Insulated roof assembly", thickness 254,2 mm, with steel profile 0.88mm on the bottom side, manufacturer Joris Ide Buziaș, Strada Principală 58, Buziaș 305100, Romania, details are described in the test report No.**03-22/22** of 30/09/2022, issued by „Istraživačko razvojni centar" d.o.o. Istočno Sarajevo - "INZA lab"- Ispitna laboratorija, Vitomira Lukica 12a, 71000 Sarajevo, as defined in item 3.1 of this report.

Sample Dimensions:	4800 x 3800 x 254,2 mm (length x width x thickness) The sample consists five panels.
Sample number:	One (1).
Panel dimension:	1250 x 3800 x 100 mm (three PIR panel plates - insulation with textile formwork) and 1050 x 3800 x 100 mm (one PIR panel plate - insulation with textile formwork). Four panel plates compiled into one sample. **Note: an internal sample was examined for the effect of a standard fire from the inside. Test angle: 0°.** **Support points of the sample: 3. Spam: 2400 mm.**
Steel sheet:	Steel profile on the bottom side
Steel dimension:	840 x 4800 mm (four) and 440 x 4800 mm (one).
Sheet steel thickness*:	0,88 mm (side exposed to fire).
Formwork thickness (membrane)*:	PVC membrane, thickness 1,2 mm (side non - exposed to fire).
Isolation core*:	PIR, thickness 100 mm.
Core material density*:	38 kg/m^3.
Load*:	30 kg/m^2. The complete sample was tested for resistance to fire under a load 560 kg, ie. 30 kg/m^2 (approx. 0,30 kN/m^2).
Mark on the sample:	No The internal assigned mark of the lab is INZA-IL-IDU-03-022.1/22
Documentation:	Attached to the report, No.:03-22/22

* Data obtained by the Customer. The testing laboratory disclaims any responsibility for data received from the Customer.

3 Test reports, test and analysis results to support classification

3.1 Test reports

The following Test Report, test results and analyzes were submitted as a basis for this classification:

Name of the Laboratoy	Name of ordering	Number of reports, date of issue and date of examination	Test method
"INZA lab" - Ispitna laboratorija, Vitomira Lukića 12a, 71000 Sarajevo, Bosna i Hercegovina	**Joris Ide Buziaș, Strada Principală 58, Buziaș 305100, Romania**	**03-22/22** 30/09/2022 (06/09/2022)	BAS EN 1365-2: 2015

3.2 Test results

Number of test reports	Criteria	Result
03-22/22	**RE**	31th minute
	REI	31th minute

4 Classification and field of application

4.1. Classification references

This classification has been carried out in accordance with point 7 of the norm BAS EN 13501-2: 2017.

4.2. Classification

Building element: for loadbearing elements, roof product: Trapezoidal steel profile 153 + PIR Insulation 100mm (Thermocomfort) + PVC membrane 1,2 mm, type: "Insulated roof assembly", thickness 254,2 mm, with steel profile 0.88mm on the bottom side, manufacturer Joris Ide Buziaș, Strada Principală 58, Buziaș 305100, Romania, can be classified according to the following combinations of performance parameters and class as needed::

R	E	I	W		t	-	M	S	C	IncSlow	sn	ef	r

In view of the submitted classification test, the following assignments are given to the test unit:

Classification of resistance to fire:

RE 20, RE 30

REI 15, REI 20, REI 30

4.3 Field of direct application

Field of direct application for building element for loadbearing elements, roof product: Trapezoidal steel profile 153 + PIR Insulation 100mm (Thermocomfort) + PVC membrane 1,2 mm, type: "Insulated roof assembly", thickness 254,2 mm, with steel profile 0.88mm on the bottom side, manufacturer Joris Ide Buziaș, Strada Principală 58, Buziaș 305100, Romania, according to BAS EN 1365-2:2015 is as follows:

4.3.1 General

The test results are directly applicable to a similar untested floor or roof provided the following is true:

a) With respect to the structural building member:
- The maximum moments and shear forces, which when calculated on the same basis as the test load, shall not be greater than those tested.

b) With respect to the ceiling system:
- The size of panels of the ceiling lining may be increased by a maximum of 5% but limited to a maximum of 50 mm. The lenght of the grid members can be increased accordingly.
- The total area accupied by fixtures and fittings relative to the area of the ceiling lining is not increased and maximum tested opening in the lining is not exceeded.

c) With respect to the cavity
- The height of the cavity h and the minimum distance d between the ceiling and the structural members are equal to or greater than those tesed.

- No material is added to the cavity unless the same amount (in terms of both weight and fire load) of material was included in the test specimen.

d) with respect to the inclination of roof constructions:
- For trussed rafter roof construction, the inclination of the bottom member (chord) is equal to its tested inclinsation with a tolerance of ±5°.
- For roofs incorporating one on more purlins, tested at an inclination angle of ≤ 10°, the results are valid for installation in practice under an angle from 0° up to 80°.
- For apex or monopitch roof construction as defined in 6.3.2 b) the inclination is ±15° in accordance with Table 1.

Table 1 - Inclination for apex or monopitch roofs

Tested at α from the horizontal	**Valid for installation in practice**
≤ 10° (nominally 'horizontal') 30° Any other angles	0° up to 15° 15° up to 45° ± 10° from the angle tested up to a limit of 80°

5 Limitations

This classification document does not constitute a type approval or product certification.

SIGNED:
Tehnical Manager of laboratoriy

Senid Osmanković, MA Mech. Eng.

Društvo sa ograničenom odgovornošću «Istraživačko razvojni centar» «IRC» d.o.o. I.Sarajevo

APPROVED:
Manager of laboratory

Senad Džanko, El. Eng.