

Protocol number: 296-09122  
Document number: 07-02CR/22  
Date: 30/09/2022

## CLASSIFICATION REPORT

for external fire exposure to roofs, 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 standard BAS CEN/TS 1187:2013

Test methods for external fire exposure to roofs - Test 1

07-02CR/22

**THIS CLASSIFICATION REPORT DEFINES THE CLASSIFICATION ASSIGNED TO THE ROOF IN ACCORDANCE WITH THE PROCEDURES GIVEN IN THE STANDARD EN 13501 - 5:2017**

**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

**Name of the product:** Trapezoidal steel profile 153 + PIR Insulation 100mm (Thermocomfort) + PVC membrane 1,2 mm

**Product type:** "Insulated roof assembly"

**Classification report No.:** 07-02CR/22

**Date of issue:** 30/09/2022

**Basis**

BAS CEN/TS 1187:2013 - Test methods for external fire exposure to roofs

BAS EN 13501-5:2017 - Fire classification of construction products and building elements. Classification using data from external fire exposure to roof tests

**Introduction**

This classification report defines the classification assigned to the roof in accordance with the procedures given in the standard BAS EN 13501-5:2017. This document does not represent type approval, or product certification.

**Validity**

The given data and results refer only to the tested and described sample.

**Content**

Report consists a total of seven(7) pages.

**Technical Manager**

  
Senid Osmanković, MA Mech. Eng.



**Laboratory manager**

  
Senad Džanko, EI. Eng

This Classification Report consists seven (7) pages and shall not be reproduced except in full without the written approval of "INZA lab" - Test Laboratory.

## 1 Introduction

This classification report defines the classification of external fire exposure to roofs assigned to the building element: 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 Buziaş, Strada Principală 58, Buziaş 305100, Romania, based on the Testing Report, **broj 07-03/22** 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 procedures defined in the standard BAS EN 13501-5: 2017.

## 2 Basic information for the classified product

### 2.1 General

The building element: T 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 Buziaş, Strada Principală 58, Buziaş 305100, Romania, is defined in accordance with procedures tested for external fire exposure to roofs.

### 2.2 Product description

Building element: 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 Buziaş, Strada Principală 58, Buziaş 305100, Romania, details are described in the test report No. **07-03/22** 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.

<b>Sample dimensions:</b>	1800 x 840 x 254.2 mm (length x width x thickness)
<b>Sample number:</b>	Four (4).
<b>Panel number:</b>	One (1 sample).
<b>Supporting structure*:</b>	Trapezoidal steel profile, thickness 0,88 mm. <b>Note: for external fire exposure to roof, at test pitch of 15°.</b>
<b>Sheet steel protection*:</b>	-
<b>PIR panel formwork*:</b>	Textile formwork PIR, thickness 100 mm .
<b>Insulation Core*:</b>	PVC membrane, thickness 1,2 mm (side exposed to fire)
<b>Formwork thickness (membrane)*:</b>	0,88 mm (side non - exposed to fire)
<b>Sheet steel thickness*:</b>	38 kg/m <sup>3</sup>
<b>Core material density*:</b>	No
<b>Mark on the sample:</b>	The internal assigned mark of the lab is INZA-IL-IDU-07-003.1/22 INZA-IL-IDU-07-003.2/22 INZA-IL-IDU-07-003.3/22 INZA-IL-IDU-07-003.4/22
<b>Documentation:</b>	Attached to the report, No. 07-03/22

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

This Classification Report consists seven (7) pages and shall not be reproduced except in full without the written approval of "INZA lab" - Test Laboratory.

### 3 Test reports, test and analysis results to support classification

#### 3.1 Test report

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

Name of the Laboratory	Name of the sponsor	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	<b>07-03/22</b> 30.09.2022. (08.09.2022.)	BAS CEN/TS 1187:2013 – Test 1

#### 3.2 Test results

##### Test conditions:

Conditions in the laboratory (near the sample):  
 ambient temperature 20°C, measure with thermometer,  
 relative humidity 47%, measure with hygrometer

- test pitch: 15°
- supporting deck: Trapezoidal steel deck

Number of test reports	Criteria	Test pitch
07-03/22	<b>B ROOF (Test 1)</b>	15°

Parameter	Criterion	Test Result on specimen				Satisfies YES/NO
		Sample1	Sample 2	Sample 3	Sample 4	
Internal fire spread upwards	<700mm	-	-	-	-	yes
External fire spread upwards	<700mm	220	180	270	320	yes
Internal fire spread downwards	<600mm	-	-	-	-	yes
External fire spread downwards	<600mm	50	80	90	0	yes
Maximum burned length	<800mm	-	-	-	-	yes

This Classification Report consists seven (7) pages and shall not be reproduced except in full without the written approval of "INZA lab" - Test Laboratory.

internal						
Maximum burned length external	<800mm	570	560	660	460	yes
Burning, droplets/debris falling from exposed side	none	none	none	none	none	yes
Burning, droplets/debris falling from unexposed side	none	none	none	none	none	yes
Single through opening	<25 mm <sup>2</sup>	0	0	0	0	yes
Sum of all through openings	<4500 mm <sup>2</sup>	0	0	0	0	yes
Lateral fire spread	<edges *	< edges	< edges	< edges	< edges	yes
Smoldering on the sample	none	none	none	none	none	yes
Radius of fire spread	<200	-	-	-	-	yes

\* the edges of the measuring zone  
 - not applicable

This Classification Report consists seven (7) pages and shall not be reproduced except in full without the written approval of "INZAlab" - Test Laboratory.

## 4 Classification and field of application

### 4.1. Classification references

This classification has been carried out in accordance with clause 9, of the standard BAS EN 13501-5: 2017, test 1.

### 4.2. Classification

Building element: Višeslojni krov: 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 oris Ide Buziaș, Strada Principală 58, Buziaș 305100, Romania, and with regard to the submitted test result, the tested sample is classified:

### Classification for external fire exposure to roofs:

**B ROOF (Test 1)**

### 4.3 Direct field of application of test results

Direct field of application of the building element: 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 oris Ide Buziaș, Strada Principală 58, Buziaș 305100, Romania, according to BAS CEN/TS 1187:2013 is as follows:

This classification is valid for the following conditions:

- Range of pitches: Test results obtained at 15° apply to roofs with pitches < 20°
- Range of decks: Trapezoidal steel deck

## 5 Limitations

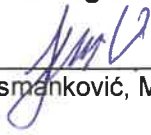
This classification document does not have any limitations about validity limits.



## 6 Warning

This document does not represent type approval, or product certification.

**SIGNED:**  
**Technical Manager of laboratory**

  
Senid Osmanković, MA Mech. Eng.



**APPROVED:**  
**Manager of laboratory**

  
Senad Džanko, El. Eng.

