



PAVUS, a.s.

AUTHORIZED BODY 216
NOTIFIED BODY 1391
ACCREDITED CERTIFICATION BODY FOR
PRODUCT CERTIFICATION NO. 3041

Branch: FIRE TESTING
LABORATORY VESELÍ NAD
LUŽNICÍ
Čtvrť J. Hybeše 879
CZ-39181 Veselí nad Lužnicí

Address:
Prosecká 412/74, CZ-19000 Praha 9 – Prosek
Tel.: +420 286 019 587 Fax: +420 286 019 590
E-mail: mail@pavus.cz, http://www.pavus.cz

Tel.: +420 381 477 418
Fax: +420 381 477 419
E-mail: veseli@pavus.cz

CLASSIFICATION OF FIRE RESISTANCE

Subject of classification: *Loadbearing floors and roofs with fire separating function according to EN 13501-2:2016: 7.3.3*

Classification report No.:

PK2-03-17-003-E-2

**Product name,
element type:**

Roof cladding (trapezoidal steel profiles, thermal insulation, roof waterproofing sheet) protected from below by ISOVER FireProtect® 150, thickness of 60 mm (one layer) loadbearing roof

Sponsor:

*Saint-Gobain Construction Products CZ a.s.
Divize ISOVER
Smrčková 2485/4
180 00 Praha 8
Czech Republic*

Prepared by:

*PAVUS, a.s.
Authorised body 216
Notified Body 1391
Accredited certification body for products No. 3041
– Accreditation issued by Czech Accreditation Institute,
Public Service Company
– Certificate of Accreditation No. 170/2019
Prosecká 412/74
190 00 Praha 9
Czech Republic*

Order reference: Z210200153 (Z210180226, Z210160292)

Date of issue:

2020-05-05

Number of copies:

4

Copy number:

1

Pages in total:

6

4 CLASSIFICATION AND FIELD OF APPLICATION

4.1 Reference of classification

This classification has been carried out in accordance with clauses 7.4.6.5 of EN 13501-2.

4.2 Classification

The element, **roof cladding (trapezoidal steel profiles, thermal insulation, roof waterproofing sheet) protected from below by ISOVER FireProtect® 150, thickness of 60 mm (one layer)**, is classified according to the example of the following combinations of performance parameters and fire resistance classes

RE 90 / REI 90

4.3 Field of application

This classification is valid for the following end use applications (in accordance with EN 13501-2 and EN 1365-2):

The results of the fire resistance test of the specimen of – **roof cladding (trapezoidal steel profiles, thermal insulation, roof waterproofing sheet) protected from below by ISOVER FireProtect® 150, thickness of 60 mm (one layer)** – can be directly applied on similar constructions where one or more of the changes listed below have been made and which are such that its stiffness and stability comply with the appropriate design code:

- 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”, see EN 1365-2: 13 a).

Maximum bending moments and shear forces per 1 m of roof width, calculated on the same basis as the test load (a simply supported beam at the test commencement)

Load	(kN/m ²)	Maximum values of	
		moments (kN.m/m)	shear forces (kN/m)
Permanent – dead load	0.47	2.12	1.41
Live – imposed load	0.53	2.39	1.590
Total load	1.00	4.50	3.00
Test load (replacing live load)		2.39	1.59

- With respect to the cavity:
 - The height of the cavity h (the maximum height at the wave top of the trapezoidal steel profile) and the minimum distance d between the ceiling and the structural members (the bottom wave of the trapezoidal steel profile), see EN 1365-2: Figure 1, are equal to or greater than those tested, i.e. $h \geq 152,2$ mm and $d \geq 0$ mm.
 - 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.
- With respect to the inclination of roof constructions (the test specimen tested 'horizontal'):
 - For roofs incorporating one or more purlins, tested at an inclination angle $\leq 10^\circ$, 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 EN 1365-2: 6.3.2 b) the test results are valid for installation in practise with the inclination of 0° to 15° .