Instytut Techniki Budowlanej
Research and development works | Accredited Group of Laboratories |
Notified Body N° 1488 | EOTA member | Certified management systems ISO 9001, ISO 27001

EXTERNAL EXPOSURE TO FIRE CLASSIFICATION REPORT

of the roofing system consists of the waterproofing membrane FATRAFOL 810/V and mineral wool as a thermal insulation

according to PN-EN 13501-5:2016

2130.1/18/Z00NZP

on behalf of
OWNER OF CLASSIFICATION REPORT
Fatra a.s.
Třida Tomáše Bati 1541
763 61 Napajedla,
Czech Republic

Contract №: 2130/18/Z00NZP

1. Introduction

This classification report defines the classification assigned to **the roofing system consists of the waterproofing membrane FATRAFOL 810/V and mineral wool as a thermal insulation** in accordance with the procedures given in PN-EN 13501-5:2016, test 2 (Polish version of EN 13501-5:2005+A1:2009, method 2).

2. Description of the roof

The roofing system consists of the waterproofing membrane FATRAFOL 810/V and mineral wool as a thermal insulation.

Layer's arrangement from the underside of the roof:

- wooden particle board (without flame retardants) – thickness of 19 mm, density ≥ 480 kg/m^3
- polyethylene foil as a vapour control barrier) – thickness from 0,2 mm to 0,5 mm
- mineral wool boards, minimum thickness of 20 mm, minimum density of 110 kg/m^3, 60 kPa (according to EN 826 standard)
- PVC-P roofing membrane FATRAFOL 810/V, thickness from 1,2 mm to 2,0 mm

3. Test reports and test results in support of this classification

3.1 Test reports

Name of laboratory	Name of sponsor	Test report ref. №	Test method
Fire Testing Laboratory of ITB	Fatra a.s.	LZP01-2130/18/Z00NZP	CEN/TS 1187:2012 (test 2)
		LZP02-2130/18/Z00NZP	

3.2 Test results

Test report № LZP01-2130/18/Z00NZP

Parameter	Criteria		Test results					Compliance
	Average	Max	Specimen № 1	Specimen № 2	Specimen № 3	Average	Max	
The length of damaged material 2m/s – roof covering	≤ 550 mm	≤ 800 mm	310	320	360	330	360	Y
The length of damaged material 2m/s – substrate	≤ 550 mm	≤ 800 mm	0	0	0	0	0	Y
The length of damaged material 4m/s – roof covering	≤ 550 mm	≤ 800 mm	300	330	320	316,6	330	Y
The length of damaged material 4m/s – substrate	≤ 550 mm	≤ 800 mm	0	0	0	0	0	Y

"0" – no damages
Test conditions: ambient temperature: 24,5°C , roof pitch: 30°
Substrate: wooden particle board thickness of 19 mm and density of 480 kg/m^3

Test report № LZP02-2130/18/Z00NZP

Parameter	Criteria		Test results					Compliance
	Average	Max	Specimen № 1	Specimen № 2	Specimen № 3	Average	Max	
The length of damaged material 2m/s – roof covering	≤ 550 mm	≤ 800 mm	280	290	310	293,3	310	Y
The length of damaged material 2m/s – substrate	≤ 550 mm	≤ 800 mm	0	0	0	0	0	Y
The length of damaged material 4m/s – roof covering	≤ 550 mm	≤ 800 mm	310	290	300	300	310	Y
The length of damaged material 4m/s – substrate	≤ 550 mm	≤ 800 mm	0	0	0	0	0	Y

"0" – no damages
Test conditions: ambient temperature: 26,2°C , roof pitch: 30°
Substrate: wooden particle board thickness of 19 mm and density of 480 kg/m^3

4 Classification and field of application

4.1 Reference

This classification has been carried out in accordance with PN-EN 13501-5:2016.

4.2 Classification

The roofing system consists of the waterproofing membrane FATRAFOL 810/V and mineral wool as a thermal insulation, described in the section 2, in relation to its fire performance is classified:

$$\mathbf{B_{roof}\ (t2)}$$

4.3 Field of application

This classification is valid for the following conditions:

1. Density of mineral wool boards ≥ 110 kg/m^3, minimum thickness of 20 mm
2. PVC-P roofing membrane FATRAFOL 810/V, thickness from 1,2 mm to 2,0 mm
3. Any pitch of the roof
4. Combustible and non-combustible substrate with minimum density of 480 kg/m^3

5 Limitations

5.1 Validity

This classification given remains valid 3 years till 30.07.2021 and as long as the composition, structure and/or the production's technology remains unchanged.

5.2 Restrictions

This classification may be reproduced only by sponsor/owner in its entirety, with annexes, without comments, shortenings and changes.
Additional witnessed copies can be issued by Fire Research Department of ITB under the request of the report's owner only.

5.3 Warning

This document does not represent type approval or certification report.

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[a] – For and on behalf of Building Research Institute

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