



quality in construction

**Building Research Institute**

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## **EXTERNAL EXPOSURE TO FIRE CLASSIFICATION REPORT**

*of the roofing system consists of the roofing membrane*

*FATRAFOL 810/V*

**according to PN-EN 13501-5+A1:2010**

**1085.2/15/Z00NPE**

on behalf of

OWNER OF CLASSIFICATION REPORT

**Fatra a.s.**

**Třída. T. Bati 1541**

**Napajedla, 763 61 Napajedla,**

**Czech Republic**

Contract №: 1085/15/Z00NP

### **1. Introduction**

This classification report defines the classification assigned to **the roofing system consists of the roofing membrane FATRAFOL 810/V** in accordance with the procedures given in PN-EN 13501-5+A1:2010, test 2 (Polish version of EN 13501-5:2005+A1:2009, method 2).

### **2. Description of the roof**

The roofing system consists of the roofing membrane FATRAFOL 810/V.

Layer's arrangement from the underside of the roof:

- wooden particle board (without flame retardants) – thickness of 20 mm, density of 680 kg/m<sup>3</sup>
- expanded polystyrene boards - minimum thickness of 100 mm, density  $\geq 15$  kg/m<sup>3</sup>
- glass fleece – mass per unit area 120 g/m<sup>2</sup>
- PVC-P roofing membrane FATRAFOL 810/V, thickness 1,2 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. nr	Test method
Fire Testing Laboratory of ITB	Fatra a.s.	LP04-1085/15/Z00NP	PN-ENV 1187:2004+A1:2007 (test 2)

#### 3.2 Test results

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	630	470	520	540,0	630	Y
The length of damaged material 2m/s – substrate	≤ 550 mm	≤ 800 mm	630	480	540	550,0	630	Y
The length of damaged material 4m/s – roof covering	≤ 550 mm	≤ 800 mm	260	390	500	383,3	500	Y
The length of damaged material 4m/s – substrate	≤ 550 mm	≤ 800 mm	260	450	500	403,3	500	Y

"0" – no damages

Test conditions: ambient temperature: 20,7°C , roof pitch: 30°

Substrate: wooden particle board thickness of 20 mm and density of 680 kg/m<sup>3</sup>

### 4 Classification and field of application

#### 4.1 Reference

This classification has been carried out in accordance with PN-EN 13501-5+A1:2010.

#### 4.2 Classification

The roofing system consists of the roofing membrane FATRAFOL 810/V, described in the section 2, in relation to its fire performance is classified:

**B<sub>roof</sub> (t2)**

#### 4.3 Field of application

This classification is valid for the following conditions:

1. Density of expanded polystyrene boards ≥ 15 kg/m<sup>3</sup>, minimum thickness of 100 mm
2. glass fleece – mass per unit area 120 g/m<sup>2</sup>
3. PVC-P roofing membrane FATRAFOL 810/V, thickness of 1,20 mm
4. Any pitch of the roof
5. Combustible and non-combustible substrate with minimum density of 510 kg/m<sup>3</sup>

### 5 Limitations

#### 5.1 Validity

This classification given remains valid 3 years till 29.05.2018 and as long as the composition, structure and/or the production's technology remains unchanged.

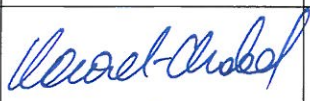
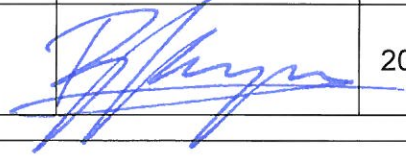
## 5.2 Restrictions

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## 5.3 Warning

This document does not represent type approval or certification report.

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