

# **Report on the classification for roofings/membranes, stressed by outside fire**

**no. 230006361-2**  
**of 30.01.2009**

**Sponsor :** Fatra a. s.  
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**Order:** Classification of the fire behaviour according to DIN EN 13501-5 Mai 2006

**Date of order:** 10.12.2008

Description / Name of the tested product:

Roofing / membrane with name:

**„FATRAFOL 810“**

This classification report defines the classification of the above stated roofing / membrane according to the procedure stated in DIN EN 13501-5:2006.

This classification report is issued additionally to the classification report written in German language with the same report number. This classification report is only valid in combination with the classification report written in German language.

## **1 Description and construction of the roofing / membrane on the standard carrier base**

### **1.1 Description of the carrier base**

The roofing can be used on any moulded steel sheet base not perforated or on any full surface base not flammable with a thickness of at least 10 mm.

### **1.2 Description of the roofing / membrane**

The roofing / membrane with the name "FATRAFOL 810" is a single-layer roof sealing sheeting with a mass per unit area of approx. 1,9 kg/m<sup>2</sup> and a thickness of 1,5 mm. The roof sealing sheeting is made of a PVC-line strengthened by polyesterfibre and will be fixed mechanically. The 100 mm thick splicings will be welded by hot gas welding. The roof sealing sheeting is ranged into fire class E according to CSN EN13501-1.

### **1.3 Description of intermediate layer**

1 layer raw glass wool with a mass per unit area of 120 g/m<sup>2</sup>.

### **1.4 Description of the thermal insulation layer.**

1 layer 100 mm EPS DAA dm 040 of producer Philippine with the Baustoffklasse DIN 4102-B1 with a compression strength of  $\geq 100$  kPa.

## **2 Test reports and test results which are the basis for this classification**

### **2.1 Test reports**

MPA NRW	Fatra a.s.	230006361	DIN V ENV 1187
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## 2.2 Test conditions

Roof slope 15°

Roof construction as described below paragraph 1

Specimen no.	criteria	Zutreffend			
		test 1	test 2	test 3	test 4
Inner fire spread roof upside	< 0,700 m	Yes	Yes	Yes	yes
Outer fire spread roof upside	< 0,700 m	Yes	Yes	Yes	yes
Inner fire spread roof downward	< 0,600 m	Yes	Yes	Yes	Yes
Outer fire spread roof downward	< 0,600 m	Yes	Yes	Yes	Yes
Dimension burnt inner length	< 0,800 m	Yes	Yes	Yes	Yes
Dimension burnt outer length	< 0,800 m	Yes	Yes	Yes	yes
Burning droplets/falling from the surface stressed	No	No	No	No	no
Penetration of burning / smouldering parts through the roof construction	No	No	No	No	no
Single holes	≤ 25 mm	Yes	Yes	Yes	yes
Total of all holes	< 4500 mm <sup>2</sup>	Yes	Yes	Yes	yes
Lateral fire spread	< Ränder <sup>a</sup>	Yes	Yes	Yes	yes
Inner smouldering	No	No	No	No	no
Maximum radius of fire spread on the flat roofs inside and outside	< 0,200 m <sup>2</sup>	Yes	Yes	Yes	yes
<sup>a</sup> margins of the measured area					

### 3 Classification and direct area of application

#### 3.1 Reference

The classification was made in accordance with paragraphs 9 table 1 of standard DIN EN 13501-5 Mai 2006.

#### 3.2 Classificaiton

The roofing / membrane „FATRAFO 810“ was classified concerning its fire behaviour in case of fire from outside as:

**B<sub>ROOF</sub> (t1)**

#### 3.3 Areas of application for this product

The classification is only valid for the roofing / membrane „FATRAFOL 810“ described below paragraph 1 and in case of a slope described below paragraph 2.2 and is valid for a roofing during the test with 15% slope for an application up to 20% slope.

As carrier base any moulded non perforated steel sheet base can be used or any full face, not inflammable base with a thickness of at least 10 mm.

### 4 Restrictions

None

Erwitte, 17.02.2009

Head of certified body

(Dipl.- Ing. Kühnen)



Person responsible

*W. Brune*  
(W. Brune)