# REPORT

Issued by an Accredited Testing Laboratory

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# Classification report for roof coverings exposed to external fire according to EN 13501-5

## 1 Introduction

This classification report defines the classification assigned to roof covering ”PLASTFOIL Classic” in accordance with the procedures given in EN 13501-5:2016.

This report replaces RISE report O100609-195749, dated 13 January 2022. This revision contains an update of the description of substrate “EUROTHANE SILVER E”.

## 2 Description of the roof covering

### 2.1 General

The product ”PLASTFOIL Classic” is defined as a roof covering. Its classification is valid for the following end use application: roof covering.

### 2.2 Product description

According to the client:

Roof covering called “PLASTFOIL Classic” consisting of PVC top layer – 45 %, Polyester reinforcing mesh – 10 % and PVC bottom layer – 45 %. The product has a nominal area weight of 1.53 – 2.72 kg/m$^2$ and a nominal thickness of 1.2 – 2.0 mm.

The roof covering is combined with two substrates.

-PIR substrate called “EUROTHANE SILVER E” with a thickness of 100 mm.

-Substrate of EPS (expanded polystyrene) having a density of 20 kg/m$^3$ approximately, with intermediate glass fleece with an area weight of 120 g/m$^2$.

## 3 Test reports

### 3.1 Test reports

This classification is based on the test reports listed below:

| Name of laboratory | Name of sponsor | Test report ref no | Accredited test method |
|---|---|---|---|
| RISE | PENOPLEX SPb Limited | O100352-184821<br>O100352-184821-1 | CEN/TS 1187 Test 2 |





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### 3.2 Test results

Test conditions: according to CEN/TS 1187:2012, test 2.

Test pitch: 30°.

PIR substrate: “EUROTHANE SILVER E” with a thickness of 100 mm.

Substrate: board of expanded polystyrene (EPS), density (20 ± 5) kg/m$^3$, thickness (50 ± 10) mm.

The product has been tested on two different substrates. A complete test series was performed on both substrates.

The product has been tested with two different thicknesses. A complete test series has been performed on the specimen with the thickness that is considered to be worst case.

| Parameter | Criteria | | Test Results | | | | | Compliance |
|---|---|---|---|---|---|---|---|---|
| | Mean [m] | Max [m] | Spe. 1 [m] | Spe. 2 [m] | Spe. 3 [m] | Mean [m] | Max [m] | |
| Damaged length at 2 m/s – roof covering | ≤0.550 | ≤0.800 | 440 | 450 | 490 | 460 | 490 | Yes |
| Damaged length at 2 m/s - substrate | ≤0.550 | ≤0.800 | 475 | 465 | 490 | 477 | 490 | Yes |
| Damaged length at 4 m/s – roof covering | ≤0.550 | ≤0.800 | 520 | 460 | 520 | 500 | 520 | Yes |
| Damaged length at 4 m/s - substrate | ≤0.550 | ≤0.800 | 480 | 475 | 530 | 495 | 530 | Yes |

## 4. Classification and field of application

### 4.1 Reference

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

### 4.2 Classification

The roof covering ”PLASTFOIL Classic” in relation to its external fire performance is classified:

$B_{ROOF}\ (t2)$

### 4.3 Field of application:

This classification is valid for the following conditions:

- Nominal thickness: 1.2 – 2.0 mm.
- Nominal area weight 1.53 – 2.72 kg/m$^2$.

Range of substrates:

- "EUROTHANE SILVER E" (PIR) with a thickness of 100 mm.
- EPS, (expanded polystyrene 20 kg/m$^3$), with intermediate glass fleece with an area weight of 120 g/m$^2$,

Range of pitches:

- All pitches.

## 5 Limitations

This classification document does not represent type approval or certification of the product.

**RISE Research Institutes of Sweden AB**
**Fire and safety - Reaction to Fire Material Lab**

Performed by

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