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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 "BGreen-it sedum tray" in accordance with the procedures given in EN 13501-5:2005 + A1:2009.

### 2 Description of the roof covering

#### 2.1 General

The product "BGreen-it sedum tray" is defined as a roof covering. Its classification is valid for the following end use application: roof covering.

#### 2.2 Product description

The product, "BGreen-it sedum tray", is fully described below.

According to the client:

Roof covering called "BGreen-it sedum tray" is a green roof system for covering of various roof types; bitumen, membrane, concrete, metal, order number B036003, production date 9/5-2016. Nominal thickness 60 mm, nominal area weight 50 kg/m<sup>2</sup>, nominal density 960 kg/m<sup>3</sup>, organic content maximum 6%. The green roofing consist of following layers:

	Composition/Content	Thickness (mm)	Area weight (kg/m <sup>2</sup> )
Layer 1	Plastic tray, PS	1.2	1.25
Layer 2	Substrate: pumice, compost, peat	60	41.38
Layer 3	Various sedum plants	20	5

### 3 Test report

#### 3.1 Test report

This classification is based on the test report listed below:

Name of laboratory	Name of sponsor	Test report ref no	Accredited test method
SP	Byggros A/S	6P04552	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°.

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

Parameter	Criteria		Test Resultat					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	0.485	0.375	0.360	0.407	0.485	Yes
Damaged length at 2 m/s - substrate	≤0.550	≤0.800	0.000	0.000	0.000	0.000	0.000	Yes
Damaged length at 4 m/s – roof covering	≤0.550	≤0.800	0.555	0.490	0.495	0.513	0.555	Yes
Damaged length at 4 m/s - substrate	≤0.550	≤0.800	0.000	0.000	0.000	0.000	0.000	Yes

**4. Classification and field of application**

**4.1 Reference**

This classification has been carried out in accordance with EN 13501-5:2005 + A1:2009.

**4.2 Classification**

The roof covering "BGreen-it sedum tray" in relation to its external fire performance is classified:

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

#### 4.3 Field of application:

This classification is valid for the following conditions:

- Nominal thickness: 60 mm.
- Nominal area weight 50 kg/m<sup>2</sup>.
- Organic content: 6%.
- Vegetation: Sedum plants.

Range of substrates:

- Combustible and non-combustible substrates, having a density  $\geq 15$  kg/m<sup>3</sup>.

Range of pitches:

- All pitches.

## 5 Limitations

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

### SP Technical Research Institute of Sweden Safety - Fire Research, Fire Dynamics

Performed by

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