

Solarstone OÜ  
Tallinna 58  
71073 Viljandi  
Estonia

## 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 "Solar Tiled Roof (STR)" or "Solar Full Roof (SFR)" in accordance with the procedures given in EN 13501-5:2016.

### 2 Description of the roof covering

#### 2.1 General

The product "Solar Tiled Roof (STR)" or "Solar Full Roof (SFR)" is defined as a roof covering. Its classification is valid for the following end use application: Solar panel.

#### 2.2 Product description

According to the client:

Roof covering called "Solar Tiled Roof (STR)" or "Solar Full Roof (SFR)" consisting of aluminium frame and hardened glass. The Solar Tiled Roof has a nominal thickness of 21 mm and has a nominal area weight of 11.5 kg/m<sup>2</sup>.

### 3 Test reports & test results in support of classification

#### 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	Solarstone OÜ	O100741-1182530rev1 O100741-1314877	CEN/TS 1187 test 2

#### RISE Research Institutes of Sweden AB

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C3 - Sensitive

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Accred. No. 1002  
Testing  
ISO/IEC 17025

### 3.2 Test results

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

Test pitch: 30°.

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	0.245	0.190	0.200	0.212	0.245	Yes
Damaged length at 2 m/s – substrate	≤0.550	≤0.800	0.085	0.080	0.090	0.085	0.090	Yes
Damaged length at 4 m/s – roof covering	≤0.550	≤0.800	0.200	0.190	0.210	0.200	0.210	Yes
Damaged length at 4 m/s – substrate	≤0.550	≤0.800	0.080	0.080	0.085	0.082	0.085	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 "Solar Tiled Roof (STR)" or "Solar Full Roof (SFR)" 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: 30 mm.
- Nominal area weight 11.15 kg/m<sup>2</sup>.

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.

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

Performed by



Henrik Fredriksson

Examined by



Per Thureson

# Verification

Transaction 09222115557545848240

## Document

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Main document

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