

## Short Form Classification Report No. 20031C

### PRODUCT

Perlight Solar IRT Integrated Roof Tile

### SPONSOR

Perlight Solar Co., Ltd.

### PRODUCT DETAILS

Perlight Solar modules consist of a series of electrically interconnected crystalline silicon solar cells, which are permanently encapsulated between a tempered glass superstrate and substrate. The entire laminate is secured within an anodized aluminium frame for structural strength.

Furthermore, the system is mounted on a wooden batten and framework structure. The frame is mechanically attached through fixation points that lay within "attachment zones" or "highest zones". Around this structure ridge flashing pieces/brackets are attached using pop rivets and flexalu band. This entire construction is then surrounded by roof tiles and built upon wooden battens which form a support structure. Underneath the battens there is a PE-foil, used as vapour barrier

For a fully detailed overview of the product details see annex A

### FIELD OF APPLICATION

Range of pitches:  $\geq 10^\circ$

### CLASSIFICATION

Broof(T4)

### STANDARDS

Test standard: CEN/TS 1187:2012-T4

Classification standard: EN 13501-1:2016

SIGNED

APPROVED

*For and on behalf of WFRGENT nv*

This short form classification report has been drafted according to EGOLF agreement EGA 08rev2:2013 "Application note: clause 5.10 [5.10/1] – Types of test reports used in fire testing". Whilst the test data and classification provided within this short form report was obtained in a test conducted fully in accordance with the standards CEN/TS 1187:2012, EN13501-5, the presentation of the results in this short form report may not satisfy the requirements of those standards and EN ISO/IEC 17025:2005/AC:2006. The presentation of the results in this manner is made by agreement with the sponsor and use of the information herein for product assessment, approval or certification purposes will be restricted.

The full classification report No. **20031B** is available at **Perlight Solar Company Ltd.**

This document is the original version of this report and is written in English. This document may be used only literally and completely for publications. For publications of certain texts, in which this document is mentioned, our permission must be obtained in advance.

The authenticity of the electronic signatures is assured by Belgium Root CA.

Annex A: Product details

<b>COMPONENTS</b>	
<b>1) VAPOUR BARRIER</b>	
Material	Low density polyethylene foil composed out of regranulates
Thickness (mm)	0,10
Flame retardants	No
Fixing method	Mechanically with screws
Classification reaction to fire according to EN13501-1	F
<b>2) WOODEN BATTENS</b>	
Material	Oregon wood
Manufacturer / Supplier	Hanssens Hout
Colour	Yellow/light brown
Thickness (mm)	27
Roof beam spacing (mm)	998
Fixation	Mechanically attached every 20 mm
<b>3) RIDGE FLASHING</b>	
Material	Ridge flashing pieces made out of aluminium
Supplier	Perlight Solar Co., Ltd.
Surface weight (g/m <sup>2</sup> )	2168 g/m <sup>2</sup>
Flame retardants	None
<b>4) SEALING STRIP 03 (USED WITH BOTTOM FLASHING)</b>	
Material	Pleated aluminium band coated on both sides with butyl tape
Total Thickness (mm)	
<i>Aluminium (mm)</i>	0,15
<i>Butyl tape (mm)</i>	1,0
Flame retardants	None
Fixing method	Mechanically with screws
Classification reaction to fire according to EN13501	Not evaluated
<b>5) SOLAR PANEL / PV Module</b>	
Material	Photovoltaic cell composed of a series of electrically interconnected crystalline silicon solar cells, which are permanently encapsulated between a low iron tempered glass superstrate and substrate. The frame surrounding the glass is made from anodized aluminium alloy
Trade name	PLM-125MB-24 Series
Manufacturer/Supplier	Perlight Solar Co., Ltd.
Thickness (mm)	24.5
Length (mm)	1036
Width (mm)	701
Frame material	Aluminium alloy
Surface weight (g/m <sup>2</sup> )	8950
Fixing method	Loose laid and clicked into the clamp slots surrounding the module
<b>6) ROOF TILES</b>	
Material	Anthracite stormpan rooftiles
Trade name	Stormpan 44
Colour	Anthracite
Length (mm)	248
Width (mm)	195
Fixing method	Loose laid