

**Low  
Carbon  
Building  
Products™**

Solarcentury product code **10658-01**

# Datasheet

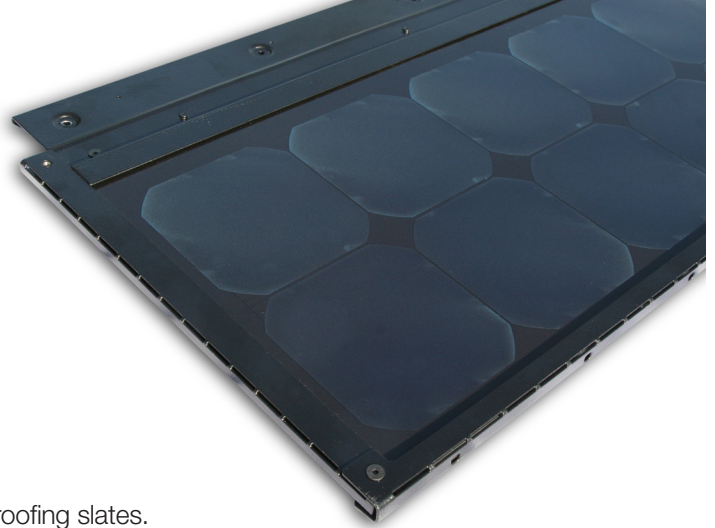
# C21e solarelectricroofslate

## Building integrated solar electric roof slate

High power output - 52Wp per slate, less than 8 square metres per kWp (kilowatt peak).

Black PV slate blends superbly with regular roofing slates offering an unrivalled aesthetic.

Power output is guaranteed to 80% of generation performance for 25 years from date of commissioning.

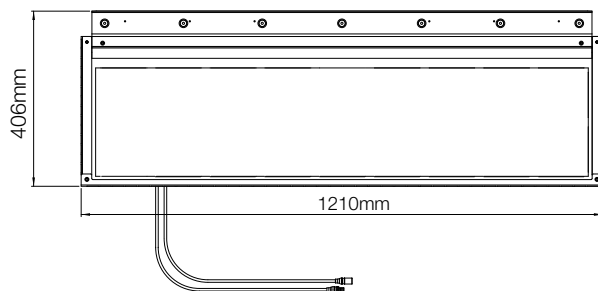


**No extra planning** - C21e slates sit flush with standard roofing slates.

**Ease of installation** - slates fit with traditional roofing practice. One solar slate covers the width of four standard slates.

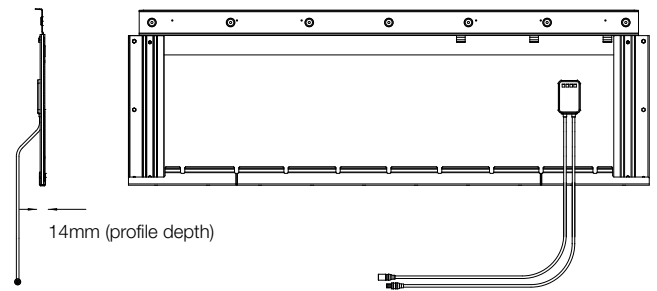
**No specialist skills** - designed to be installed by slaters, as part of the roof build.

**Fast to fit** - does not slow down build programme, all electrical work is carried out within the building.



**C21e Slate size** 1210mm x 406mm overall  
1210mm x 280mm exposed

**Minimum pitch** 25°



**Gauge (batten spacing)** 285mm (for C21e Slate courses)



**solarcentury**

**Solarcentury** is the UK's leading solar solutions brand. We work with architects, housing developers and home owners to deliver renewable energy and carbon reduction solutions.

We are also the leading UK distributor for the world's best solar electric technologies and have helped more homes and businesses go solar than anyone else in Britain.

## Dimensions

<b>Tile size</b>	<b>1210mm x 406mm</b> overall, 1210mm x 280mm exposed
<b>Minimum pitch</b>	<b>25°</b>
<b>Gauge (batten spacing)</b>	<b>285mm</b> (for C21e Slate courses)
<b>Covering width</b>	1210mm
<b>Covering capacity (net.)</b>	3 PV slates/m <sup>2</sup>
<b>Individual tile weight</b>	5.1kg
<b>Weight of tiling</b>	15.1kg/m <sup>2</sup>
<b>Batten size</b> (fixed to BS 5534)	Up to 600mm rafter centres - <b>50mm x 25mm</b>
<b>Screws and fixings</b>	4mm x 20mm self tapping stainless steel screws with EPDM washer (supplied) Slate hooks and soak trays (supplied)

Please refer to the C21e Slate design guide for details on the headlap and battenspacing for Slates used with C21e Slate.  
Solarcentury Solar Electric Roof Slates must be laid and fixed to comply with BS 5534: the British Standard Code of practice for slating and tiling, and BS 8000: Part 6: the British Standard Code of practice for workmanship on building sites.

## Specification

<b>Photovoltaic technology</b>	Monocrystalline 125mm square
<b>Power*</b>	52Wp
<b>m<sup>2</sup> per kWp</b>	7.8 (90mm headlap)
<b>Laminate size (active area)</b>	1174mm x 318mm
<b>Cell efficiency</b>	20%
<b>Module efficiency</b>	14.9%
<b>Maximum power voltage*</b>	9.8V
<b>Maximum power current*</b>	5.3A
<b>Open circuit voltage*</b>	12.0V
<b>Short circuit current*</b>	5.6A
<b>Maximum system voltage</b>	600V DC
<b>Cables and connectors</b>	Class II double insulated 4mm cable Standard MC IP65 push fit connectors

## Slate Compatibility

**600mm x 300mm**  
**Natural, Fibre cement,**  
**Reconsituted.**

## Accreditations and Standards

**External fire exposure test to BS 476-3: 1975, AA rating (Indicative)**  
**Designed & manufactured to BS EN 490: 1994 where appropriate**  
**Weather-tightness tested by BRE to PIT Agreed Roofing Industry standards prEN15601**  
**PV laminate manufactured to IEC 61215 and Class II**

## Warranties

Power output guaranteed for 25 years from date of commissioning (80% performance)



**solarcentury**

91-94 Lower Marsh  
Waterloo  
London SE1 7AB  
T+44 (0)20 7803 0100  
F+44 (0)20 7803 0101  
www.solarcentury.com

© Mar 2008 Solarcentury. Specifications and design are subject to change without notice.  
For installations outside standard specification please contact Solarcentury

\* Measured under Standard Test Conditions of 1000W/m<sup>2</sup> irradiance, AM1.5 spectrum, 25°C cell temperature. Values of current, voltage and power ± 10%.



C21e features SunPower solar cells