

Solar electricity for slate roofs

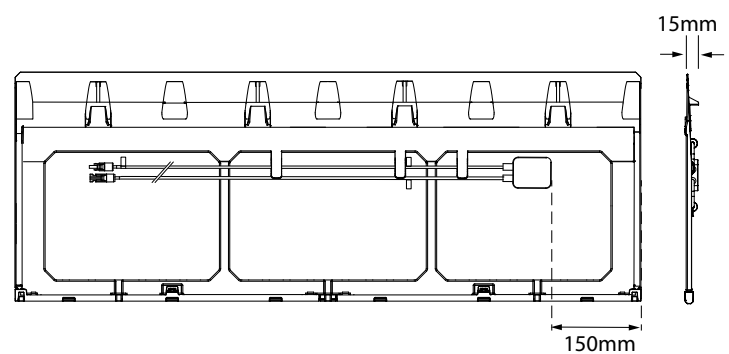
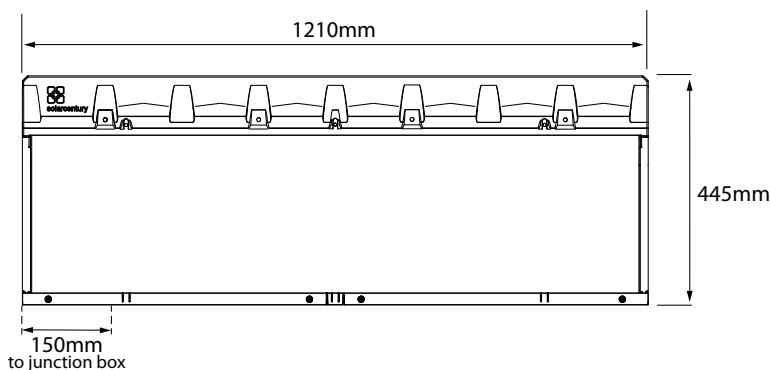
Solarcentury's C21e slate system delivers universal compatibility with natural and fibre cement slates and an excellent performance per m², providing a perfect complement to a traditional slate roof.

No extra planning: C21e solar slates sit flush with standard roofing slates, to provide a traditional finish. They protect your home from the elements whilst producing electricity.

Ease of installation: Fitted to standard wooden battens using traditional roofing practice, one C21e covers the width of several conventional slates.

No specialist skills: Designed to be installed by slaters, as part of the roof build, the C21e solar slate system fits 'straight out of the box' without the need for bespoke flashings or fillers.

Fast to fit: Faster to fit than traditional slates, and complete with simple click-to-fit connectors, allowing all of the electrical work to be carried out within the building.



Dimensions

Gross width	1210 mm	
Gross length	445 mm	
Profile depth	15 mm	
Covering width	1210 mm	
C21e slate gauge	300 mm	
Maximum roof pitch (subject to fixing specification)	90°	
	Moderate exposure	Severe exposure
Minimum roof pitch (subject to fixing specification)*	22.5°	25.0°
Maximum rafter length	9m	6m
Maximum building height	12m	12m
Covering capacity	2.8 C21e/m ²	
Individual unit weight	4.9 kg	
Weight as laid	13.9 kg/m ²	
Batten size (minimum) for rafters not exceeding 600mm centres, nailed to BS5534	50 x 25 mm	

Screws and fixings supplied:

C21e stainless steel roof hooks with Torx fixing screws (T20) three per C21e unit,
C21e stainless steel starter course hooks with Torx fixing screws (T20) three per unit
on the bottom course, adjustable soak trays.

Refer to fixing specification for the slates to be installed alongside C21e.

*If the minimum pitch for the conventional slate is greater than the minimum pitch for C21e, the fixing specification for the conventional slate should take precedence. Please refer to the C21e slate installation guide for details.

Electrical specification

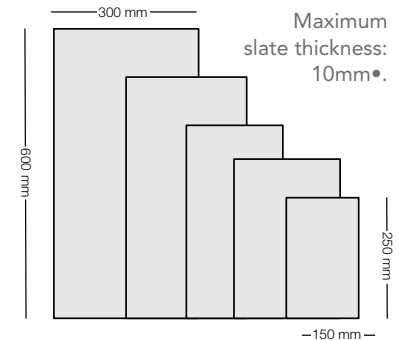
Photovoltaic cell technology	Monocrystalline	
Cell dimensions (quantity) / diodes	125 x 125 mm (18) / 1	
Peak power ⁽¹⁾	50 Wp	
Wp/m ²	138	
Laminate size (active area)	1174 x 318 mm	
Cell efficiency	18.9 %	
Module efficiency	13.9 %	
Maximum power voltage (Vmp) ⁽²⁾	9.2 V	
Maximum power current (Imp) ⁽²⁾	5.45 A	
Open circuit voltage (Voc) ⁽²⁾	11.4 V	
Short circuit current (Isc) ⁽²⁾	5.70 A	
Maximum system voltage (Vdc)	1000 V DC	
Series fuse rating	9 A	
NOCT	48.0 °C	
Temperature coefficient of the open-circuit voltage	-0.027 V/°C	-0.241 %/°C
Temperature coefficient of the short-circuit current	1.88 mA/°C	0.033 %/°C
Temperature coefficient of the power	-0.37 %/°C	
Connectors	MC4 type IP65 push fit connectors	
Cables	Class II double insulated 4mm ² cable, rated -40° +85°	

(1) Measured under Standard Test Conditions of 1000W/m² irradiance, AM 1.5 spectrum, 25°C cell temperature.

(2) Values of current, voltage and power +/- 5%.

Compatibility

C21e slate is compatible with natural slates across a wide range of standard sizes, ranging from 600mm x 300mm to 250mm x 150mm.



C21e slate is also compatible with standard fibre cement slates, including Marley (Eternit) Rivendale, Garsdale, Birkdale and Thrutone. See full list on solarcentury.co.uk.

Certifications & warranty

Weather-tightness tested to roofing industry standard prEN15601.
External fire exposure test to BS 476-3: 2004, AB rating.



Power output guaranteed for 25 years from date of commissioning (80% performance). 10 year product warranty.

Installation

Please refer to the C21e Installation Guide before starting installation. Solarcentury solar 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.



For information on purchasing a C21e solar system, please contact the Solarcentury C21e team on 020 7549 1186

Solarcentury
50 Great Sutton St
London EC1V 0DF
T +44 (0)20 7549 1000
F +44 (0)20 7549 1001
www.solarcentury.com



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For installations outside of the Specification please contact Solarcentury.
Solarcentury reserves the right to change specifications when necessary without prior notice.