



System Datasheet

C21e Tile Systems

Solarcentury's C21e Tile Systems have been designed to deliver the optimum power output, matching the tiles to the most effective Inverter and including all of the components required for a successful installation.

The systems are delivered to site with all of the on-roof items packaged together, to make the installation process as simple as possible.

Solarcentury's C21e Tile delivers an excellent performance per m² and is compatible with a wide range of roof tiles, providing a perfect complement to a traditional pitched roof.



Roof tile Compatibility

| | | |
|---|--|--|
| Cemex (Russell) - Grampian, Highland. | Northstone - Slemish Mk 2 | Sandtoft - Calderdale, Calderdale Dual, Cassius, Rivius (with Sandtoft's adaptor) |
| Lagan - Flat Tile | Quinn - Western Slate | |
| Marley (Eternit) - Modern, Duo Modern, | Redland (Monier) - Mini Stonewold | |

System Components

System Size

| | | | | | | | | |
|--------------------------------------|------|------|------|------|------|------|------|------|
| Number of C21e Units | 18 | 24 | 36 | 42 | 48 | 54 | 60 | 72 |
| System size kWp⁽¹⁾ | 0.94 | 1.25 | 1.87 | 2.18 | 2.50 | 2.81 | 3.12 | 3.74 |

Roofer's Pack

| | | | | | | | | |
|--|----|----|----|----|----|----|----|----|
| C21e solar electric roof tile | 18 | 24 | 36 | 42 | 48 | 54 | 60 | 72 |
| Screw pack⁽²⁾ | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| MC Field Cable (4mm x 10m) | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 |
| Return Cable Pack (4mm)⁽³⁾ | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C21e on-roof installation guide | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

Quantity

Electrician's Pack

| | | | | | | | | |
|---|------------|------------|------------|--------------|--------------|--------------|--------------|------------|
| Inverter with positive grounding set | SMA SB1100 | SMA SB1100 | SMA SB1700 | Fronius IG20 | Fronius IG20 | Fronius IG30 | Fronius IG30 | SMA SB3300 |
| Wireless display | SMA | SMA | SMA | Fronius | Fronius | Fronius | Fronius | SMA |
| 16A DC Isolator with flying leads | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 25A AC isolator | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Generation Meter with extended cover | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Photovoltaic warning sticker set | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Laminated electrical schematic | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| C21e electrical installation guide | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Pallet footprint for system | 1 | 1x2 high | 1x2 high | 1x2 high | 1x2 high + 1 | 1x2 high + 1 | 1x2 high + 1 | 2x2 high |

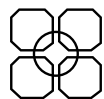
Quantity

Notes

- (1) Measured under Standard Test Conditions of 1000W/m² irradiance, AM 1.5 spectrum, 25°C cell temperature.
- (2) A small quantity of spare screws are provided
- (3) Return Cable lengths are layout dependent. Please refer to the Layout Table and Product Codes for details

C21e Layout Options

| System Size (C21e units) | kWp ⁽¹⁾ | kWh p/a ⁽²⁾ | CO ₂ Offset p/a (kg) ⁽³⁾ | Dimensions of C21 Array | | | | | | | | | Product Order Code | Your order |
|-----------------------------|--------------------|------------------------|---|-------------------------|---------|---------------------|---|--------|--------|---------------------|----------------------|--------------------------------------|-----------------------|--------------------------|
| | | | | Excluding tile border | | | Including tile border (at 90mm headlap) | | | Product Description | | | | |
| | | | | Rows | Columns | Return Cable Length | Length | Width | Length | | Width | Area | | |
| 18 | 0.936 | 796 | 452 | 9 | 2 | 4.5m | 2.97m | 2.51m | 3.63m | 3.11m | 16.46m ² | C21E TILE, 18 UNITS, GB (9R X 2C) | 11797-01 | <input type="checkbox"/> |
| | | | | 6 | 3 | 3m | 1.98m | 3.69m | 2.64 | 4.29m | 16.93m ² | C21E TILE, 18 UNITS, GB (6R X 3C) | 11798-01 | <input type="checkbox"/> |
| | | | | 3 | 6 | 2m | 0.99m | 7.23m | 1.65m | 7.83m | 21.02m ² | C21E TILE, 18 UNITS, GB (3R X 6C) | 11799-01 | <input type="checkbox"/> |
| | | | | 2 | 9 | 2m | 0.66m | 10.77m | 1.32m | 11.37m | 26.02m ² | C21E TILE, 18 UNITS, GB (2R X 9C) | 11800-01 | <input type="checkbox"/> |
| | | | | 1 | 18 | 2m | 0.33m | 21.39m | 0.99m | 21.99m | 41.90m ² | C21E TILE, 18 UNITS, GB (1R X 18C) | 11801-01 | <input type="checkbox"/> |
| 24 | 1.248 | 1,061 | 603 | 12 | 2 | 4.5m | 3.96m | 2.51m | 4.62m | 3.11m | 19.99m ² | C21E TILE, 24 UNITS, GB (12R X 2C) | 11802-01 | <input type="checkbox"/> |
| | | | | 8 | 3 | 4.5m | 2.64m | 3.69m | 3.30m | 4.29m | 20.01m ² | C21E TILE, 24 UNITS, GB (8R X 3C) | 11803-01 | <input type="checkbox"/> |
| | | | | 6 | 4 | 3m | 1.98m | 4.87m | 2.64m | 5.47m | 20.92m ² | C21E TILE, 24 UNITS, GB (6R X 4C) | 11804-01 | <input type="checkbox"/> |
| | | | | 4 | 6 | 2m | 1.32m | 7.23m | 1.98m | 7.83m | 23.65m ² | C21E TILE, 24 UNITS, GB (4R X 6C) | 11805-01 | <input type="checkbox"/> |
| | | | | 3 | 8 | 2m | 0.99m | 9.59m | 1.65m | 10.19m | 26.83m ² | C21E TILE, 24 UNITS, GB (3R X 8C) | 11806-01 | <input type="checkbox"/> |
| 36 | 1.872 | 1,591 | 904 | 2 | 12 | 2m | 0.66m | 14.31m | 1.32m | 14.91m | 33.64m ² | C21E TILE, 24 UNITS, GB (2R X 12C) | 11807-01 | <input type="checkbox"/> |
| | | | | 9 | 4 | 4.5m | 2.97m | 4.87m | 3.63m | 5.47m | 26.63 m ² | C21E TILE, 36 UNITS, GB (9R X 4C) | 11808-01 | <input type="checkbox"/> |
| | | | | 6 | 6 | 3m | 1.98m | 7.23m | 2.64m | 7.83m | 28.91m ² | C21E TILE, 36 UNITS, GB (6R X 6C) | 11809-01 | <input type="checkbox"/> |
| | | | | 3 | 12 | 2m | 0.99m | 14.31m | 1.65m | 14.91m | 38.45m ² | C21E TILE, 36 UNITS, GB (3R X 12C) | 11810-01 | <input type="checkbox"/> |
| | | | | 2 | 18 | 2m | 0.66m | 21.39m | 1.32m | 21.99m | 48.89m ² | C21E TILE, 36 UNITS, GB (2R X 18C) | 11811-01 | <input type="checkbox"/> |
| 42 | 2.184 | 1,856 | 1054 | 7 | 6 | 3m | 2.31m | 7.23m | 2.97m | 7.83m | 31.54m ² | C21E TILE, 42 UNITS, GB (7R X 6C) | 11812-01 | <input type="checkbox"/> |
| | | | | 3 | 14 | 2m | 0.99m | 16.67m | 1.65m | 17.27m | 44.26m ² | C21E TILE, 42 UNITS, GB (3R X 14C) | 11813-01 | <input type="checkbox"/> |
| 48 | 2.496 | 2122 | 1,205 | 12 | 4 | 4.5m | 3.96m | 4.87m | 4.62m | 5.47m | 32.33m ² | C21E TILE, 48 UNITS, GB (12R X 4C) | 11814-01 | <input type="checkbox"/> |
| | | | | 8 | 6 | 4.5m | 2.64m | 7.23m | 3.30m | 7.83m | 34.16m ² | C21E TILE, 48 UNITS, GB (8R X 6C) | 11815-01 | <input type="checkbox"/> |
| | | | | 6 | 8 | 3m | 1.98m | 9.59m | 2.64m | 10.19m | 36.89m ² | C21E TILE, 48 UNITS, GB (6R X 8C) | 11816-01 | <input type="checkbox"/> |
| | | | | 4 | 12 | 2m | 1.32m | 14.31m | 1.98m | 14.91m | 43.25m ² | C21E TILE, 48 UNITS, GB (4R X 12C) | 11817-01 | <input type="checkbox"/> |
| | | | | 3 | 16 | 2m | 0.99m | 19.03m | 1.65m | 19.63m | 50.06m ² | C21E TILE, 48 UNITS, GB (3R X 16C) | 11818-01 | <input type="checkbox"/> |
| 54 | 2.808 | 2,387 | 1,356 | 9 | 6 | 4.5m | 2.97m | 7.23m | 3.63m | 7.83m | 36.79m ² | C21E TILE, 54 UNITS, GB (9R X 6C) | 11819-01 | <input type="checkbox"/> |
| | | | | 3 | 18 | 2m | 0.99m | 21.39m | 1.65m | 21.99m | 55.87m ² | C21E TILE, 54 UNITS, GB (3R X 18C) | 11820-01 | <input type="checkbox"/> |
| 60 | 3.12 | 2,652 | 1,506 | 15 | 4 | 6m | 4.95m | 4.87m | 5.61m | 5.47m | 38.04m ² | C21E TILE, 60 UNITS, GB (15R X 4C) | 11821-01 | <input type="checkbox"/> |
| | | | | 10 | 6 | 4.5m | 3.30m | 7.23m | 3.96m | 7.83m | 39.42m ² | C21E TILE, 60 UNITS, GB (10R X 6C) | 11822-01 | <input type="checkbox"/> |
| | | | | 6 | 10 | 3m | 1.98m | 11.95m | 2.64m | 12.55m | 44.88m ² | C21E TILE, 60 UNITS, GB (6R X 10C) | 11823-01 | <input type="checkbox"/> |
| | | | | 5 | 12 | 3m | 1.65m | 14.31m | 2.31m | 14.91m | 48.06m ² | C21E TILE, 60 UNITS, GB (5R X 12C) | 11824-01 | <input type="checkbox"/> |
| | | | | 3 | 20 | 2m | 0.99m | 23.75m | 1.65m | 24.35m | 61.68m ² | C21E TILE, 60 UNITS, GB (3R X 20C) | 11825-01 | <input type="checkbox"/> |
| 72 | 3.744 | 3,182 | 1,808 | 18 | 4 | 6m | 5.94m | 4.87m | 6.60m | 5.47m | 43.75m ² | C21E TILE, 72 UNITS, GB (18R X 4C) | 11826-01 | <input type="checkbox"/> |
| | | | | 12 | 6 | 4.5m | 3.96m | 7.23m | 4.62m | 7.83m | 44.68m ² | C21E TILE, 72 UNITS, GB (12R X 6C) | 11827-01 | <input type="checkbox"/> |
| | | | | 9 | 8 | 4.5m | 2.97m | 9.59m | 3.63m | 10.19m | 46.96m ² | C21E TILE, 72 UNITS, GB (9R X 8C) | 11828-01 | <input type="checkbox"/> |
| | | | | 6 | 12 | 3m | 1.98m | 14.31m | 2.64m | 14.91m | 52.87m ² | C21E TILE, 72 UNITS, GB (6R X 12C) | 11829-01 | <input type="checkbox"/> |
| | | | | 4 | 18 | 2m | 1.32m | 21.39m | 1.98m | 21.99m | 62.86m ² | C21E TILE, 72 UNITS, GB (4R X 18C) | 11830-01 | <input type="checkbox"/> |
| | | | | | | | | | | | Accessories | METER, C21E STRING CHECKER | 11411-01 | <input type="checkbox"/> |



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Notes
(1) Measured under Standard Test Conditions of 1000W/m² irradiance, AM 1.5 spectrum, 25°C cell temperature.
(2) For a south facing roof in the UK, generating 850 units (kilowatt hours - kWh) per kWp. Actual performance may vary, see www.solarcentury.co.uk/performance.
(3) Using the SAP calculation method for grid displaced electricity - 0.568kg per kilowatt hour.

The components provided in each system will support the layouts as shown.
One Return Cable is provided per column of C21e. The cable length is based on the Layout Option selected at the time of ordering.
The dimensions stated are for guidance and are based on the C21e Design Rules for the list of Compatible tiles. Please refer to the on-roof installation guide for full details.
Please refer to the C21e Tile datasheet for full laminate specification details.

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