



## CASE STUDY

**St Alban's Church,  
Chiswick, London**

**Integrated solar PV  
modules fitted to a  
church roof using  
Solarcentury C21e  
tiles**

### Providing power for a community building

After the local community petitioned to stop this place of worship from being knocked down and converted to luxury flats, a regeneration project was commissioned to restore the church to its former glory with a few modern touches.

As part of the regeneration works, solar tiles integrated into the new roof covering were designed by the architect. Chelsfield Solar were employed by the electrical contractors working directly under the architects, HDMW, to install a solar PV system that was in keeping with the roof and did not affect the traditional look of the church.

The resulting PV installation feeds energy into the three phase communal power supply to the place of worship.

### Chelsfield Solar Project Role

Specialist PV system contractor employed by the electrical contractor, Maguire Brothers. Detailed PV system electrical and mechanical design, supply, installation and commissioning.

#### Technical Specifications

- Single PV array comprising 309 x 50W SolarCentury C21e PV tiles with a surface area of 112.2m<sup>2</sup>.
- 15.45kWp system connected to 1 x Solis 15k grid-connected inverter.
- System faces south and is tilted at 55°.
- G59 three phase mains connection into the main fuse board with excess energy exported back to the grid.
- The system is expected to generate approximately 12,669kWh of electricity per year, saving annual emissions of 6,570kg of CO<sub>2</sub>.
- PV tiles integrated with the new roof tiles fitted during the refurbishment.

