



Oyster Reach

Whitstable, Kent

A prestigious development of five luxury apartments constructed to Passivhaus principles. Powered by hybrid solar technology.

TECHNOLOGY:

Photovoltaic/Thermal hybrid modules (PV-T)

- 15x PowerVolt
- 15x PowerTherm

SYSTEM PEAK PERFORMANCE:

- Electrical 5.7kWp
- Thermal 17.1kWp

SYSTEM ANNUAL PERFORMANCE:

- Electrical 4531kWh
- Thermal 5144 kWh
- Displaced Co2 5000 Kg

BUILDING PERFORMANCE:

- Efficiency rating 97%
- EPC & EIA rating A
- SAP energy cost per flat £175 p/a





Convert Energy Ltd



System overview:

Heating:

Electric UFH powered by electrical generation from PV-T array.

Hot Water:

Centralised system with 2x thermal stores and 5x HW cylinders with immersion powered by solar thermal generation from PV-T array

Making the most of your location!

Initial plans were to provide heating and hot water via photovoltaics. Site constraints and a desire for each apartment to enjoy sea views meant that final designs provided only a fraction of the roof area required to satisfy demand with conventional PV.

We installed an electrical bias PV-T array (PowerVolt) on the east facing roof to pre heat the input of a thermal bias PV-T array (PowerTherm) on the west. The electrical generation was apportioned to satisfy the stated offset for each apartment's SAP requirement.

With individual cylinders fed by centralised thermal stores, each apartment can benefit from every technology the building has to offer whilst maintaining individual control and autonomy.

"In both the quality of product and the level of knowledge and support, David and Ben proved to be the perfect partners with whom we are looking forward to future collaboration"

Norman Hinckes - Principal Contractor

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