

Duppas Junior School, Croydon

Products

- ModuSol solar package
- Powerstock calorifiers
- Purewell VariHeat boilers
- Dorchester DR-FC water heaters

Sector

- Education
- Public sector

Building

- Primary school
- Refurbishment

Application

- Space heating 360kW
- Modular boilers
- Hot water 1170 litres/hour
- Multiple water heaters



Hamworthy high efficiency solar collectors



High performance storage calorifiers

With the installation of a Hamworthy ModuSol solar package, Purewell VariHeat condensing boilers and direct fired Dorchester water heaters, Duppas Junior School in Croydon has invested in sustainable technology for the future.

The specification of solar is part of Croydon Council's policy of investment into renewable energy sources for its schools wherever appropriate. Duppas School, with its south facing roof, gets the maximum amount of sun, a suitable solar site.

Our Solution

Commented Paul Bushell, design engineer for Bianco Sale Ltd, the Building Services Consultants: "Solar was an important consideration in this project as it fitted with the council's policy of using renewables. We've used Hamworthy Heating products before and their Purewell VariHeat boilers fitted the specification in terms of size and output, and their Dorchester water heaters are efficient and reliable. Now that Hamworthy has solar products and the expertise to back them up, the decision was made to go ahead using their products to provide an efficient new system for the supply of hot water and heating to the school."

The solar was installed by one of Hamworthy's approved installers, Natural

Power Wales, and energy is absorbed using the high efficiency solar collectors, which are tested and certified to EN 12975. The collectors have a moulded polycarbonate casing which provides permanent corrosion resistance and a lightweight compact panel. The integral fixing points facilitate easy installation, in-roof, on-roof or free-standing using A-frames.

The system has been designed to provide pre-heated feed water into two direct fired Dorchester DR-FC 25 water heaters, via a Powerstock calorifier, saving energy in the hot water system.

The consultant believes there will be savings of around 25% per annum

on running costs – savings which demonstrate the school's commitment to using renewable energy.

The school's heating system is separate to the domestic hot water requirements and is supplied by two Purewell VariHeat 180c condensing boilers. The boilers were chosen for their environmental credentials and ultra low emissions, achieving European Class 5 performance and exceeding Building Regulations requirements for seasonal efficiency. Operating as a sealed system, the boilers supply heating to the school buildings via radiator systems and have a combined output of 360kW.



Hamworthy Dorchester water heaters and Purewell VariHeat boilers working in unison to provide heating and hot water