

Green Roof

Canon Burrows Primary School, Ashton-Under-Lyne



Background

Canon Burrows Church of England Primary School is situated in Ashton-under-Lyne, Tameside. The school has a strong focus on sustainability and commitment to reduce its carbon footprint, and was the first primary school in the UK to win the coveted ECO Green Flag award. During a major rebuilding project, the school took the opportunity to boost this commitment by introducing solar panels and a living 'green' roof.

Challenge

The school was 'live' during construction, and the safety of the pupils and operatives was paramount and much emphasis was put on this aspect by all parties. The school is situated on a major spine road and so access was restricted. Deliveries therefore had to be off-loaded before 7am thus ensuring pedestrian safety.

The project was also being carried out during a prolonged and very hot time of year and so irrigation of the green roof would be vital.

Solution

The double 35° roof pitch was a challenge, but after design and detail meetings between Icopal Ltd, D Shawcross Ltd and Thorpe Whyman & Briggs Architects, the Icopal Rootbar capsheet system was specified. To prevent slippage of the green roof Icopal Intermediate and Edge Restraints were used. The Icopal Extensive Mineral Wool substrate was also used as the slope was over 20° and an aggregate substrate would have been more difficult to restrain.

Loading the system onto the roof was given consideration, and a 'hit and miss' even weight distribution method on each side of the ridge was adopted.

Following installation of the Icopal Extensive Sedum System continued irrigation for the first ten weeks was vital and a 'leaky pipe' and sprinkler arrangement fixed to the ridge cap was utilised that kept the sedum blanket damp throughout its early growing period. The architects were delighted with the safe working practices put in place by D Shawcross and by the design and application of the sedum roof, particularly as the project was completed on programme and within budget.

The new green roof was always going to be the centre piece of the new classroom extension block for a school that prides itself on sustainability and will provide an eco-friendly case study for the school children.

Project:

Canon Burrows C of E Primary School

Area:

300 m²

Completion Date:

2010

System:

Total Torch & Rootbar System and Icopal Extensive Sedum Green Roof

Client:

Tameside MBC

Specifier:

Thorpe Whyman & Briggs, Oldham

Main Contractor:

P&L Construction, Oldham

Contractor:

D. Shawcross Ltd, Wigan