



# Green Roof

## Westport Lake Visitor Centre / K Pendlebury & Sons Ltd, Wigan



### Background

Westport Lake, situated just north of Stoke-on-Trent, is the largest body of water in the area, home to a large variety of water birds and an important site for migrating birds during winter. As part of a series of improvements, a new Visitor Centre was commissioned by British Waterways on behalf of Stoke-on-Trent Council. The brief was to create a state of the art Visitor Centre on the canal network, with a focus on sustainable design, to reflect the regeneration that was taking place around the city.

### Challenge

The building is elevated to provide views of the lake from an observation deck. The floor design of the observation area is timber slatted decking, which curves up to form the walls of the terrace, resulting in some complex detailing when waterproofing. In addition, the main roof features a sedum green roof, and houses both photovoltaic and solar thermal panels in order to provide power and hot water, along with a number of rooflights and service penetrations, all of which required waterproofing.

### Solution

IMA Contractor K Pendlebury & Sons worked closely with Icopal from an early stage to provide guidance and design input regarding waterproofing, especially of the lower decks, and the sedum green roof.

The team installed Icopal's SureWeld TPO system on the lower observation deck, and Icopal's Rootbar waterproofing and Extensive Green Roof System on the main roof. These products delivered many benefits, including storm water attenuation, reduced solar heat ingress, rainwater filtration and a wildlife habitat for numerous invertebrates.

The solar and PV panels were mounted on waterproofed kerbs, and Icopal's Roofgard accessories were used for the cable ducts, soil vent pipes, lightning conductor clips and outlets, providing continuous waterproofing integrity at these critical points. Roof safety was provided with a KwikLine system, in partnership with Latchways plc. Constant Force Posts were protected with Icopal weathering collars to guarantee waterproofing around each.

As a result of Icopal's products and high quality installation the building achieved a BREEAM 'excellent' rating and was shortlisted as 'Highly Commended' at the RIBA 2010 awards.

### Project:

Westport Lake Visitor Centre, Stoke-on-Trent, Staffordshire

### Area:

350m<sup>2</sup>

### Completion Date:

2009

### System:

SureWeld TPO (lower viewing terrace),  
Extensive Sedum Roof, Rootbar System

### Client:

Stoke City Council and British Waterways

### Specifier:

Walker Simpson Architects, Manchester

### IMA Contractor:

K Pendlebury & Sons Ltd, Wigan