

Case Study: World Wildlife Fund HQ, Woking

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Aluminium systems from Kawneer feature on the new headquarters of the WWF

Glazing systems from Kawneer were used on the new headquarters of the World Wildlife Fund for many reasons, not least their ability to enable savings in terms of energy and impact on the environment.

Building: World Wildlife Fund Headquarters

Location: Woking

Architect: Hopkins Architects

Main Contractor: Willmott Dixon

Installer: JPJ Installations

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Kawneer systems help WWF achieve a carbon first

Kawneer's AA®100 mullion-drained and AA®100 SSG (Structurally Silicone Glazed) curtain walling with 50mm sightlines and concealed vents, AA®3110 horizontal sliding doors and 190 heavy-duty commercial entrance doors feature on the façade and roof of the £14million Living Planet Centre on the site of a former car park in Woking, Surrey. The systems were put forward by approved specialist sub-contractor JPJ Installations for main contractor Willmott Dixon who, to meet the brief from the leading conservation charity, forensically tracked the carbon content of every single element of the 8,900m², 18-month build. The carbon budget had assumed that the aluminium framing included 30% recycled content but JPJ suggested an alternative supplier that could supply 80% recycled aluminium – and that was Kawneer. Tackling climate change and living sustainably are central to WWF's philosophy so it was hardly surprising that the new headquarters, constructed of traditional concrete frame with a timber diagrid roof, include the latest thinking on sustainable design.

The building is naturally shaded by surrounding trees and features a mixed-mode ventilation system, drawing air out through roof cowls in natural ventilation mode, and saving energy on tempering incoming air by drawing it through 60m of earth ducts in mechanical mode. Warmth is provided by a ground-source heat pump. Generous roof lighting (Kawneer's AA®100 curtain walling) provides double the light of a typical office and 20% of the building's regulated energy needs are provided by photovoltaic panels. It will use 53% less energy than a typical office building and has been certified as BREEAM "Outstanding". The Living Planet Centre is the first building in the UK to have undergone a full whole-life carbon assessment, and partly as a result of Willmott Dixon's sustainability tracking, the completed building has a whole-life carbon footprint 42% smaller than the scheme submitted at planning stage. Hopkins' brief was to produce a highly sustainable pedagogical building that aligned WWF with its global position on sustainability and the practice met this by working closely with WWF UK and a team of specialist consultants, enabling them to interrogate WWF's working methods and how these could be changed to provide a more effective working environment, alongside constant interrogation of materials for whole life carbon impact and building energy performance. Kawneer's AA®100 stick system fell in line with the building's specification and had the ability to significantly reduce the building's carbon footprint with its high recycled aluminium content. The glazed curtain walling plays a significant role in the design as it allows for a high level of internal daylight, increasing the feeling of well-being and decreasing the need for artificial light, along with providing WWF with a connection back to their surrounds – Horsell Moor and Basingstoke Canal. Sustainability was a major driving force. Part of the process was minimising embodied CO₂ over the building's lifetime. Aluminium products were interrogated to ensure that maximum quantities of recycled material were utilised to reduce their carbon impact.

The Kawneer systems fitted within the project's budget and met aesthetic requirements with minimised silicone joint lines, efficient profiles and clean connections. With the building's stringent requirements, U-values, G-values and air pressure testing were all critical factors in selecting a product. All a far cry from the converted light industrial unit the charity had operated out of for the past 20 years. And all thanks to a £5million donation.

Please contact our Architectural Services Team if you have a project you would like to discuss: Tel: 01928 502604 / Email: kawneerAST@arconic.com

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AA®100 Mullion Drained



AA®3110 Horizontal Sliding Door

