

/ CASE STUDY

Lucent W1 Piccadilly Circus Roofing

When Wates Group tendered to construct the iconic Lucent W1 building behind the Lights at Piccadilly Circus they chose a specialist roofing team that could deliver the architects' design intent and meet their strict environmental requirements.

The iconic Lucent W1 building has one of the most complex roofs in the capital. **Image:** Landsec/Jason Hawkes



ACCUROOF
A part of SIG Roofing

CASE STUDY LUCENT W1 PICCADILLY CIRCUS ROOFING

Project:

Lucent W1

Client:

Landsec

Products Used:

Cwt-y-bugail Welsh Slate

eIZinc Lava zinc

IKO Permatec Hot Melt

Supplier:

Specialist Roofing Contractor:

E J Roberts Roofing

Distribution:

SIG Roofing

Location:

London

Completion:

August 2023

The Project

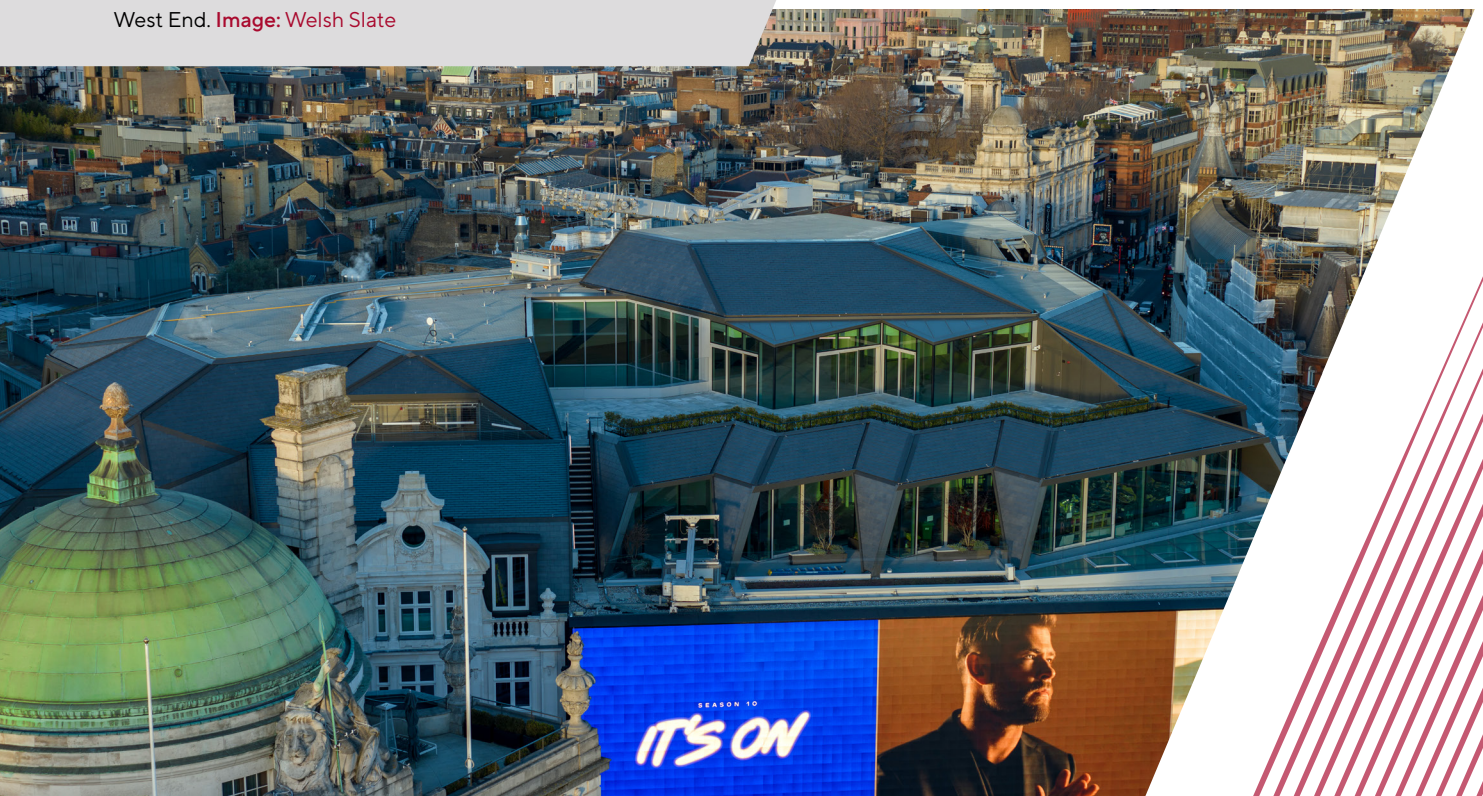
Lucent W1 unifies an almost entire city block of 13 separate buildings into a new complex of over 13,000m² of retail, restaurant, offices and luxury apartments. Key to the architectural success of the scheme is a complex folding roofscape incorporating 22 terraces and dozens of sloping planes, some of which were intended to fold down towards busy street level.

The original design intent of Lucent W1 was to construct the roof from thousands of ceramic faience tiles set into a steel structure. Roofing over such a group of buildings in an aesthetically pleasing way can be difficult, particularly in a regulatory environment where sustainability requirements are a prerequisite and fire and building safety rule out more traditional methods.

Client Landsec was targeting both BREEAM Outstanding and the Gold WELL Building Standard. This ruled out lead flashings, and strict fire safety requirements excluded hot works. The solution was to bring in a team that specialised in a collaborative, system agnostic approach.

Wates Group approached AccuRoof (as SIG Design and Technology) in 2019 to design the roofscape and appointed multi-disciplinary ACIS registered contractor E J Roberts Roofing to execute their design. The team worked collaboratively with Fletcher Priest Architects and Wates to deliver the project in natural slate, zinc and hot melt.

Lucent W1 sits behind one of the most famous facades in the West End. **Image: Welsh Slate**





The roofscape at Lucent W1 combines slate, zinc and hot melt in a unique way. **Image:** Welsh Slate

Design and Installation

Design of the roofing package had to be carried out collaboratively. Working from the architects' BIM, AccuRoof's design team worked to coordinate interfaces between slate, hot melt, zinc flashings and cladding, window packages and three reconstructed historic facades, and the new steel frame. A key challenge was ensuring that rainwater could discharge into concealed gutters effectively, and the steel frame required up to 20mm movement both horizontally and vertically.

Before installation began a large test rig of part of the Shaftesbury Avenue elevation was constructed and tested to European levels of weather-tightness. This confirmed the completed roof would endure wind speeds of over 100 miles an hour.

Dozens of roofers, the slaters alone with over 100 years' experience, were coordinated by E J Roberts Roofing. Two flagship stores in the block were to continue trading and all 28,000 slates had to be craned up to the roof and stored prior to installation. The historic façades were dismantled, cleaned

and reconstructed, causing deviations from the structural details modeled in BIM, so the team had to confirm dimensions and redesign some details to incorporate dimensional changes. Across the project the AccuRoof design team produced over 300 details.

Lucent W1 was completed in the autumn of 2023 after over four years designing, testing and installing, and was awarded Best Multi-discipline Project over £250k at the national Roofing Awards 2024.

The story of the design and installation of Lucent W1 is told in a knowledge base post on the AccuRoof website.

To find out more call us on
01509 505714 or visit
www.accuroof.co.uk