



This site in Kidderminster, a key facility specialising in optical manufacturing, required roof refurbishment to support its sustainability goals. The existing roof was in poor condition, with significant coating deterioration and blocked gutters. Central Group was tasked with preparing the roof for overcladding and enabling the installation of a photovoltaic (PV) system to help reduce the site's carbon footprint.

LOCATION
KIDDERMINSTER

CLIENT
VISION LABS

TIMESCALE
6 MONTHS

BUDGET
£800K

SIZE
2,955m²



Approach

The existing roof was in poor condition, with significant coating deterioration that was clogging the gutters. The main goal was to prepare the roof for the installation of a solar PV system, positioning the location as a pioneer in reducing its carbon footprint. Overcladding the roof was identified as the best approach to ensure its suitability for the planned upgrades.

A structural survey was conducted to assess whether the roof substructure could support the weight of new insulated panels and solar PV system.

An initial design for the PV array was created, including a proposed panel layout and power output calculations, which were presented to the client and reviewed in coordination with National Grid.

Our Work

This project was delivered in one continuous phase and was completed three weeks ahead of schedule and within the agreed budget.

The building remained fully operational throughout the project, requiring careful planning to ensure the safety and convenience of staff, with fire exits and key access points maintained at all times. Edge protection was installed on three sides of the building, and over-netting was added to secure the existing rooflights.

The roof underwent a comprehensive refurbishment, starting with the removal of flaking paint and the installation of a new gutter system to improve water management. A high-performance insulated roofing system was then installed, complete with custom flashings and trims for a polished finish. The hips were upgraded using modern-profile panels to ensure a seamless and durable result.

To enhance sustainability, solar panels were installed with mounting brackets. A separate unit on a custom-built concrete foundation was constructed to house the inverters necessary for managing the energy system.

Finally, a new fall protection system was installed, including a man-safe line system and guardrails, ensuring the safety of maintenance staff and compliance with modern safety standards.



Challenges

The site remained operational 24/7, requiring careful planning to ensure staff safety. Walkways were double-boarded to maintain access to fire exits, and protective fans were installed over exit doors. Edge protection was implemented on three sides of the building to ensure safe and secure access throughout the project.

