

BedZED Estate Sustainable Roofing Solution



BACKGROUND

The BedZED Estate in Sutton is recognised as the UK's first large-scale mixed-use sustainable housing development and has become an internationally recognised benchmark for environmentally conscious design. Completed in 2002, the estate continues to demonstrate how low-carbon living can be successfully integrated into modern residential communities.

Following the deterioration of the original built-up felt roofing system, associated insulation and green roof areas, a comprehensive refurbishment programme was commissioned to restore the long-term performance of the building envelope while remaining true to the estate's original sustainability principles. Inspire Contract Services were appointed to deliver the roofing works, working closely with the main contractor, Niblock Building Contractors, and specialist supply chain partners throughout the 44-week programme.

As the estate remained fully occupied throughout the works, careful planning, resident liaison and robust health and safety procedures were fundamental to the successful delivery of the project. Particular care was also required when working adjacent to the special educational needs school located within the North Block, where activities were carefully planned to minimise disruption and ensure the safety of pupils, staff and residents alike. The programme also included the installation of new green roof systems and infrastructure to support a living wall, helping to reinforce the site's long-term environmental objectives.

CLIENT Niblock Building Contractors

SECTOR Residential

LOCATION Wallington, South London

SOLUTION Built-up Felt & Green Roofing



THE WORKS

INSPIRE
GROUP

The project included the complete refurbishment of the estate's roof and walkway waterproofing systems together with associated sustainable landscaping elements. Works included:

- Removal of the existing waterproofing system and insulation, followed by installation of a new Langley Waterproofing insulated built-up felt roofing system.
- Installation of new liquid-applied waterproofing systems to external walkways.
- Installation of new green roof systems across designated roof areas.
- Installation of the galvanised support framework for a new living wall.
- Coordination of irrigation systems serving both the green roof and living wall installations.
- Installation of new insulation to improve the thermal performance of the buildings.

THE RESULT

The completed refurbishment has significantly improved the long-term performance, durability and sustainability of the BedZED Estate's roofing systems while preserving the architectural vision that has made the development internationally recognised. The new Langley waterproofing system, upgraded insulation and renewed walkway waterproofing provide a robust, high-performance solution designed to protect the buildings for many years to come.

A key feature of the project was the successful reinstatement of the estate's sustainable design principles through the installation of new green roof areas and infrastructure to support a living wall. These elements contribute not only to the visual character of the development but also to biodiversity, rainwater management and the long-term environmental performance of the site.

Working within a fully occupied residential environment presented significant logistical and technical challenges throughout the 44-week programme. Inspire worked closely with the main contractor, residents and specialist manufacturers to carefully phase the works, maintain safe access and minimise disruption while delivering the project to the highest standards of quality and workmanship.

Ultimately, the adoption of Safe2Torch installation methods, combined with rigorous quality control procedures and close collaboration with Langley Waterproofing, ensured the project was completed safely and successfully within this unique and highly sensitive environment.

This project demonstrates Inspire's expertise in delivering technically demanding roofing refurbishment projects where sustainability, heritage and occupied environments must all be carefully balanced to achieve a successful outcome.

