

Crawley Data Centre

Industrial Roof Refurbishment & Safety Upgrades



BACKGROUND

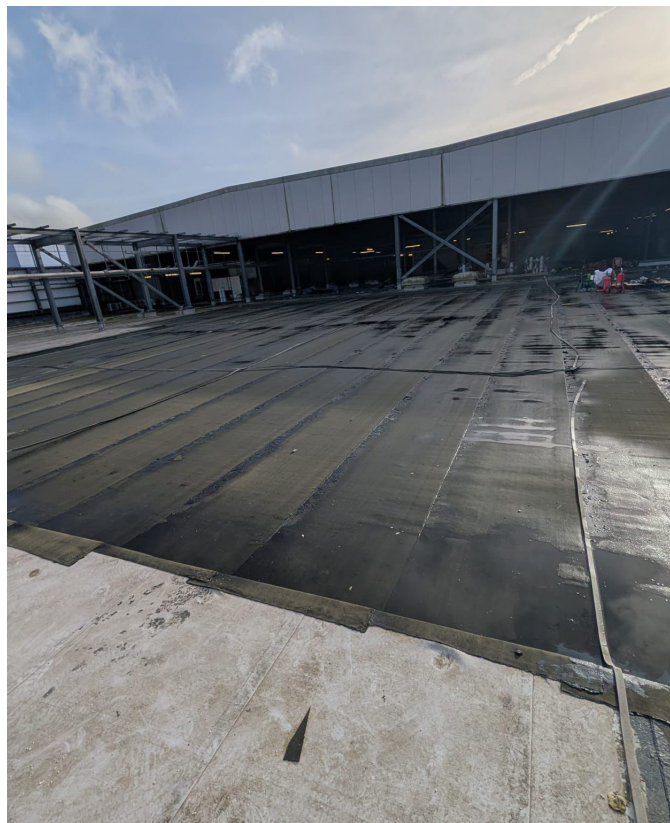
The Crawley Data Centre is a critical operational facility requiring a highly resilient and fire-compliant roofing solution. Following condition assessments of the existing roof, a full refurbishment was specified to improve thermal performance, fire resistance and long-term waterproofing integrity, while ensuring the site could remain operational throughout the works.

Inspire Contract Services were appointed as Principal Contractor to deliver the project, taking responsibility for site management, access provision, health and safety coordination and quality control. Given the sensitive nature of the building and the presence of essential roof-mounted plant and equipment, careful planning and sequencing of the works was essential.

The refurbishment strategy involved the complete removal of the existing single ply membrane and insulation back to the structural metal deck, followed by the installation of a new SIKA built-up felt roofing system incorporating significantly upgraded insulation to meet current performance standards.

The works were delivered across approximately 6,000m² of flat roof area, in strict accordance with the approved SIKA technical specification and Safe2Torch guidance, ensuring both performance compliance and safe installation within this live environment.

CLIENT	Confidential
SECTOR	Data Centre / Commercial
LOCATION	Crawley, West Sussex
SOLUTION	BUFR & Insulation Upgrade
SIZE / VALUE	6,000m ² / £1.3 Million



THE WORKS

INSPIRE
GROUP

Key elements of the works included:

- Installation of full access scaffolding and roof edge handrails to the main roof area to provide safe working conditions throughout the programme.
- Careful stripping of the existing single ply waterproofing membrane.
- Mechanically fixed PIR insulation back to the metal deck.
- Installation of a new built-up Sika roofing system, incorporating an air and vapour control layer, reinforced underlay and cap sheet in accordance with the project specification.
- Installation of 210mm mechanically fixed rockwool insulation, significantly improving both the thermal performance and fire resistance of the roof construction.
- Formation of new detailing to upstands, penetrations and drainage locations in line with Sika technical requirements.
- Removal and reinstatement of mechanical and electrical plant located at roof level, with close coordination to minimise disruption to building operations.

THE RESULT

The completed roofing works provide a robust, fire-resistant and thermally efficient solution that meets the demanding operational requirements of a live data centre environment. The new Sika built-up felt roofing system, incorporating 210mm of rockwool insulation, delivers long-term waterproofing performance while achieving a U-value of 0.18 W/m²K, significantly improving the overall thermal efficiency of the building.

The refurbishment has also enhanced the roof's fire performance and resilience, a critical consideration for data centre facilities housing sensitive equipment and essential infrastructure. Careful attention to detailing around penetrations, upstands and drainage points ensures the integrity of the system and supports the provision of a long-term manufacturer-backed guarantee.

Throughout the 26-week programme, Inspire are successfully managing the project as Principal Contractor, implementing controlled access arrangements, phased working and close coordination with on-site stakeholders. This approach allows essential mechanical and electrical plant to be safely removed and reinstated without disruption to critical services, while maintaining the highest standards of safety and quality.

This project once again demonstrates Inspire's capability to deliver technically complex roofing refurbishments within sensitive, high-risk environments, combining detailed planning, specialist system knowledge and effective project management.

