

CASE STUDY: HEATHERWOOD HOSPITAL

Building Envelope Solution for Modern Healthcare Facility





PROJECT BREAKDOWN



MAC were appointed to deliver the extensive roofing, cladding and associated building envelope package for the new £100 million Heatherwood Hospital in Ascot. Working closely with Kier and the project design team from an early stage, MAC helped develop and deliver a complex multi-system solution combining high-performance waterproofing, insulated roofing and cladding, rainscreen façades, timber cladding and extensive green roof areas.



Client:

Frimley Health NHS
Foundation Trust



Contract Value:
£4.0 million



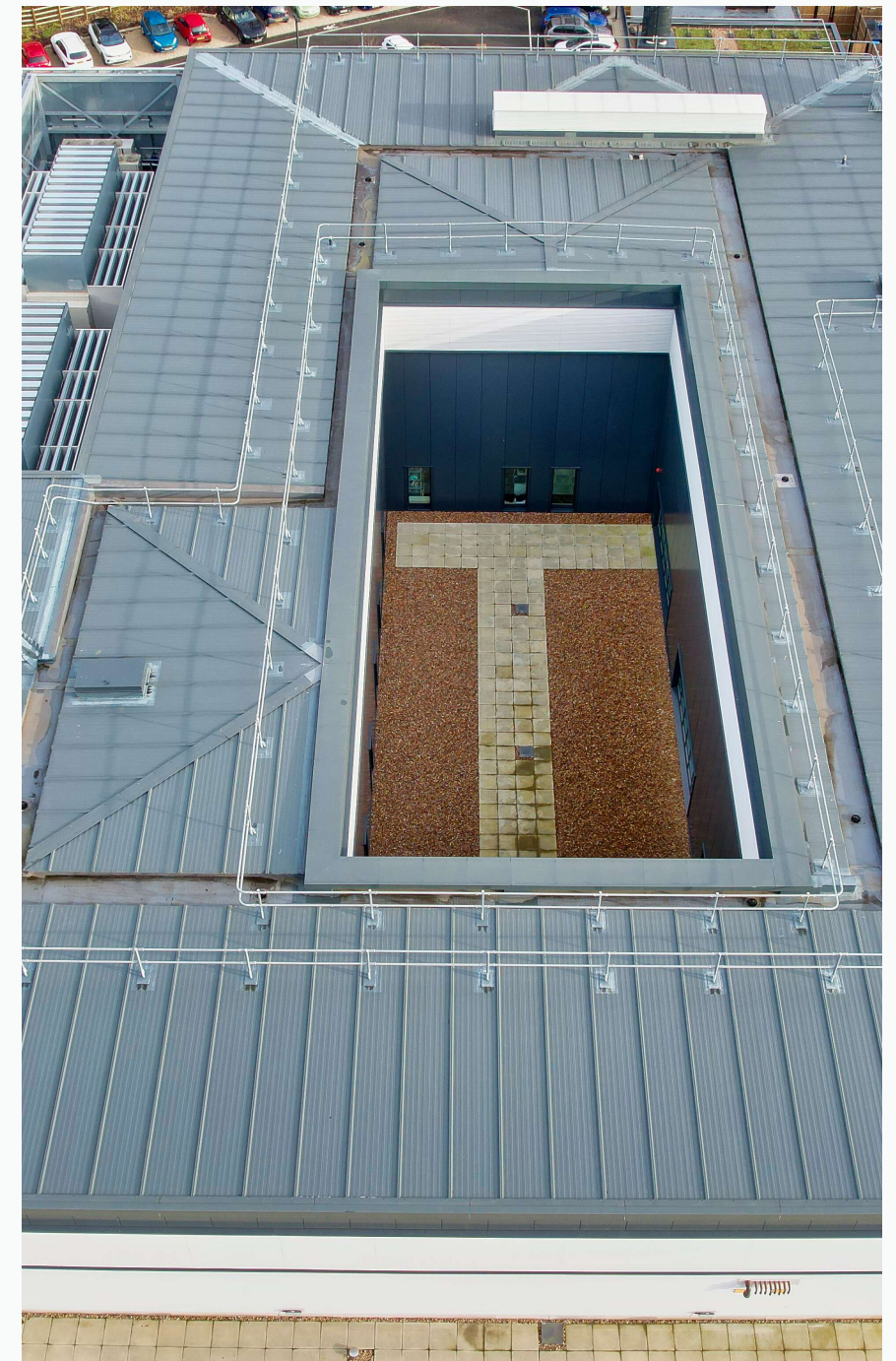
Location:

Ascot,
Berkshire



Sector:

Healthcare



ABOUT MAC



Five decades of roofing and envelope expertise.

With over 50 years' experience, MAC Roofing & Cladding has established itself as one of the UK's leading specialists in roofing, cladding and external envelope solutions. As a family-owned business with national reach, MAC combines long-standing values with the technical expertise, resources and management systems required to deliver major construction projects across both the public and private sectors.

Working extensively within defence, nuclear and critical infrastructure environments, MAC understands the unique operational, security and

compliance requirements associated with highly regulated facilities. From new build developments to complex refurbishment programmes, the company delivers high-performance building envelope solutions safely, efficiently and with minimal disruption.

This combination of specialist technical knowledge, experienced project teams and robust quality management has enabled MAC to become a trusted delivery partner for clients operating within some of the UK's most demanding construction environments.

PROJECT OVERVIEW



Following a detailed selection process, MAC were chosen to deliver the £4 million roofing, cladding and associated building envelope package for Heatherwood Hospital, Frimley Health NHS Foundation Trust's new £100 million planned care facility in Ascot.

Working with main contractor Kier, MAC delivered multiple roofing, waterproofing and façade systems across the development. Sustainability was central to the project, with the new hospital incorporating solar PV, a living roof and other measures designed to reduce its environmental impact.



Early specialist involvement enabled MAC to develop a **multi-system envelope solution** tailored to the performance requirements of each individual area.

THE SOLUTION



Working with BMI Icopal and the wider project team, MAC developed a tailored waterproofing strategy incorporating three systems according to the individual requirements of each roof area.

BMI Icopal Parabit Solo hot melt waterproofing was installed within an inverted roof assembly to the main concrete roof and podium areas, while a Rootbar built-up felt system with cut-to-falls insulation provided the warm roof solution beneath the extensive green roof areas. Elastoflex cold-applied liquid waterproofing was used to smaller canopy areas, lift overruns and complex detailing.

The wider envelope package incorporated Kingspan low-profile composite roofing, Proteus

rainscreen cladding, Eurobond panels, Rainspan backing panels, Siberian larch cladding and bespoke plank soffits manufactured by MAC Fabrication. Detailed coordination ensured the different systems worked successfully together while achieving the architectural intent and required thermal and weathering performance.

To accelerate the programme, MAC divided its roofing operatives into dedicated teams. One installed vapour control layers to provide temporary waterproofing while another followed with insulation and the final roof covering. This enabled significant areas of the building to become watertight ahead of programme, allowing following trades to begin their internal works earlier.

THE CHALLENGE

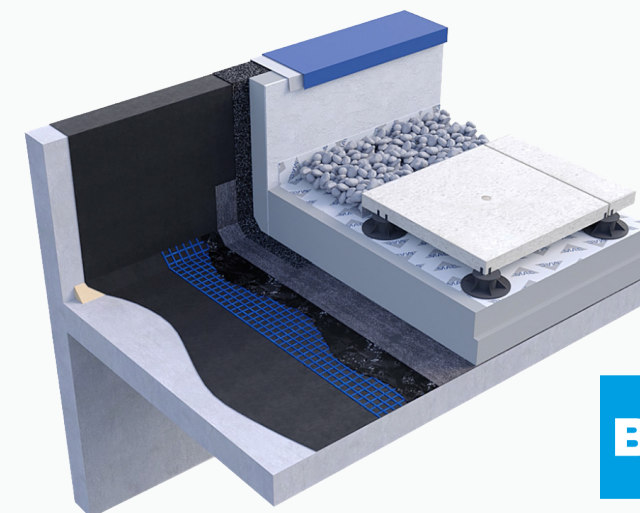


The scale and complexity of Heatherwood Hospital demanded a range of roofing and cladding solutions to meet differing performance, detailing and access requirements, while the programme required the building to be made air and watertight quickly so internal trades could progress.

MAC became involved during pre-construction, working with Kier and the design team to review the original specification. Rather than using a single

cold-applied waterproofing system throughout, MAC proposed a combination of systems better suited to the individual roof areas, improving buildability, installation efficiency and warranty provision.

The façade presented further challenges, with large cladding panels requiring installation around restricted balcony areas with limited crane access and slab loading



PROJECT DELIVERY



Successful delivery relied on extensive pre-construction planning and close collaboration between MAC, Kier, the design team, manufacturers and other specialist trades.

A dedicated multidisciplinary project team coordinated design, procurement, planning, HSEQ and installation, with detailed workshops used to review sequencing, interfaces and non-standard details before work commenced. BIM 360 provided

site teams with immediate access to approved drawings and system information.

The programme was reviewed weekly with Kier to maintain key milestones and coordinate activities across the busy site. Specialist lifting solutions were also developed to manoeuvre large cladding panels through constrained balcony areas, overcoming one of the project's most significant logistical challenges.



HEALTH, SAFETY & QUALITY



Health, safety and quality were embedded throughout the project, with MAC working closely with Kier and manufacturers to identify safer and more efficient methods of delivery.

Project-specific HSEQ requirements were supported by regular inspections and MAC's daily 'Safe 2 Start & Safe 2 Finish' initiative, which was subsequently adopted by other subcontractors on site.

Delivery during the COVID-19 pandemic also required new working practices to maintain safety and programme continuity. Quality assurance remained equally rigorous, with regular technical inspections, manufacturer checks and electronic testing of flat roofing areas helping ensure completed works were defect-free before handover.

SUSTAINABILITY

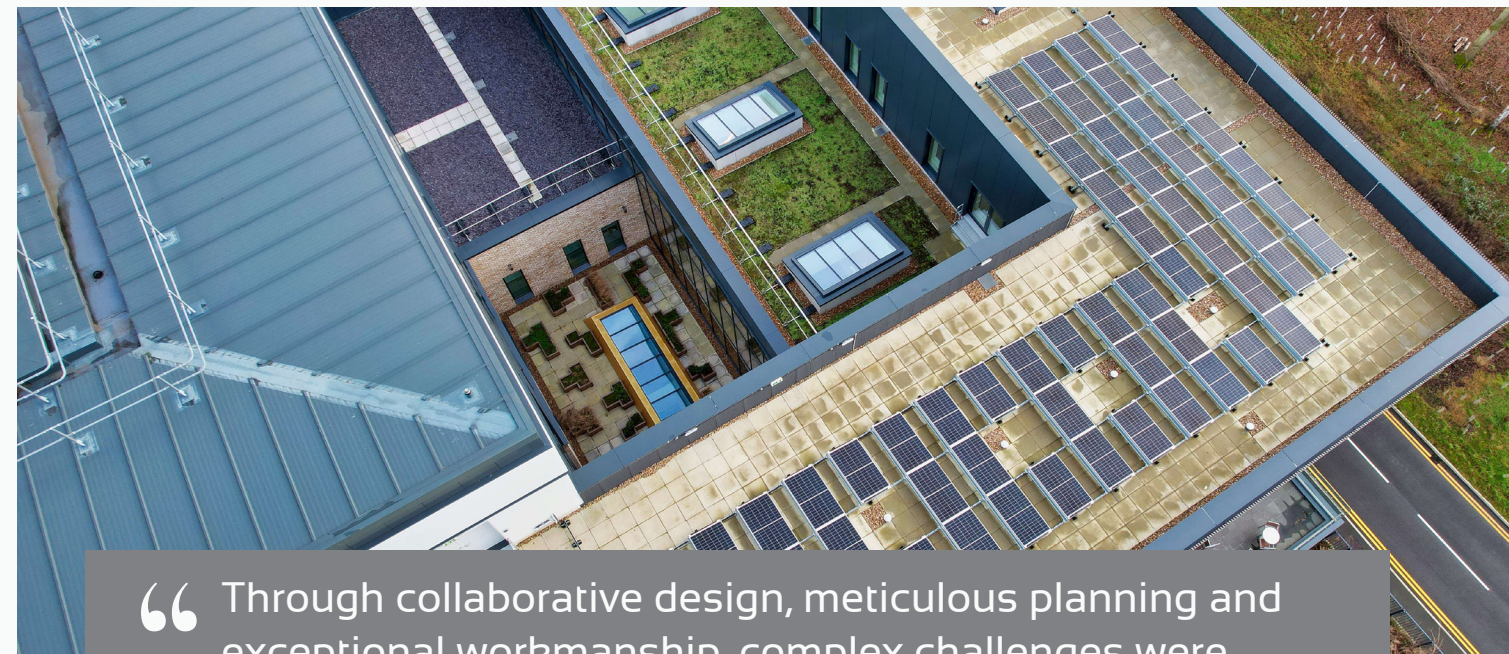


Environmental performance was an important consideration throughout the project, with roofing and cladding specifications reviewed against BREEAM requirements and opportunities identified to minimise waste and responsibly source materials.

A 1,500m² biodiverse green roof was installed to support the surrounding woodland habitat, alongside high-performance insulation and photovoltaic systems. MAC also introduced

secondary waterproofing beneath the PV installation to protect the primary membrane and ensure its long-term integrity.

Heatherwood Hospital demonstrates the value MAC brings through early contractor involvement – combining technical expertise, practical installation knowledge and collaborative project delivery to transform complex design requirements into robust, buildable and high-performance envelope solutions.



“Through collaborative design, meticulous planning and exceptional workmanship, complex challenges were transformed into practical, buildable solutions.”

THE OUTCOME



MAC successfully delivered this complex multi-million pound building envelope package for one of the region's most significant new healthcare developments.

Through early specialist involvement and close collaboration with Kier and the wider project team, MAC helped refine the original specification, improve buildability and overcome a range of complex

design, access and installation challenges. Careful planning and coordination also helped maintain programme efficiency throughout the works.

The completed solution combines high-performance roofing and cladding systems with sustainable technologies to provide a durable, thermally efficient building envelope for this state-of-the-art healthcare facility.



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