



Residential Build-to-Rent Scheme, Bonnington Road

WATERPROOFING: Eurorof Premium, Alkorplan Reinforced Membrane, Derbigum Anti-Root, Blackdown Green Roof

PROJECT SIZE: 10,200m²

PROJECT LOCATION: Edinburgh

EUROROF
SOLUTIONS

ALKORPLAN
BY ALUMASC

 **DERBIGUM**®


BLACKDOWN
ROOF & PODIUM LANDSCAPING
By Alumasc Roofing

Your Complete Roofing Solution

Environmentally Focussed | Responsibly Sourced | Ethically Driven

 **ALUMASC**
ROOFING

BONNINGTON ROAD, EDINBURGH



Project Overview

Located between Bonnington Road Lane and Anderson Place, this site is part of a transitioning industrial area. The Build-to-Rent (BTR) development consists of 464 apartments, ranging from studios to three-bedroom units, with communal amenities, ground-level communal spaces, and landscaped roof terraces. The design emphasised maximising active frontage while providing high-quality private open spaces, including three courtyards, a woodland ecological area, and roof terraces.

Client Brief

Alumasc's expertise was sought by long-term partner Graham Construction for this 10,200m² project. There were multiple roof areas in the scheme that needed consideration, and a unified warranty period was required, including a back-to-back warranty. The client aimed to meet specific BREEAM and BNG targets, with a focus on achieving fire classification BrooF(t4). Technical meetings were crucial in aligning the solution with the client's budget and project scope. Key challenges included the lightweight steel frame construction, which impacted the roofing specifications, as well as a mix of flat and pitched applications to integrate with the surrounding built environment. Additionally, the development adhered to an all electric model in line with Edinburgh's goal to be a net-zero city by 2030.

Solution

A design-driven approach was adopted, utilising a range of Alumasc systems as a single-source supplier to surpass client expectations. A 30-year comprehensive warranty was awarded, ensuring long-term reliability.

Alkorplan single-ply membranes were specified for the 2000m² pitched roofs, paired with A1-rated insulation and standing seams to provide exceptional durability, weather resistance, and thermal efficiency. This design enhanced both the structural integrity and visual appeal, ensuring energy savings and reliable long-term performance.

The project showcased a multi-discipline approach to roofing, with part of the scheme utilising Eurorof Premium across 4,200m². This system, which incorporated Alumasc Mineral Wool Insulation, was selected for its excellent thermal and fire performance.

The inclusion of Alumasc ProSolar lightweight PV panel supports provided an innovative solar solution for the 4,200m² bituminous roofs, eliminating the need for heavy ballast. Fully bonded to the waterproofing system, it improved rainwater runoff and aligned with renewable energy targets, delivering maximum cost-benefit to the client.

The project also incorporated 4,000m² of Blackdown Extensive green roofs with NatureMat finishes and BBA-approved Derbigum Anti-Root membranes, known for their durability with a lifespan exceeding 50 years. These features enhance the site's environmental sustainability by creating natural habitats and promoting local biodiversity.

The complexities of the site demanded careful planning and tailored solutions. Alumasc tackled various challenges, including insulation height requirements, U-value targets, and detailed features such as door thresholds and parapet designs. One of the key challenges was managing the roof's load due to the lightweight steel framework, requiring creative approaches to preserve both structural integrity and efficiency. Additionally, ensuring compliance with strict fire regulations was a top priority, with the roofing system carefully aligned with the project's broader fire safety strategy.

Working in Partnership

For over a decade, the strong partnership between Graham Construction, Tandragee Roofing, and Alumasc Roofing has ensured seamless project execution from start to finish. This long-standing collaboration has facilitated efficient project delivery, with technical and sales queries, including detailed wind uplift calculations, promptly addressed.

After successfully securing the project through a competitive tender, Tandragee Roofing efficiently installed a range of waterproofing systems and green roofs to meet the specific project requirements. Tandragee Roofing has a proven track record of delivering projects with Alumasc Roofing across both the UK and Ireland.

The Alumasc team played a key role throughout the project's lifecycle, actively participating in initial design discussions, offering valuable insights, and providing consistent support from concept development to project completion.

Craig Begg, Director of Scotland and Ireland, says **"Bonnington Road serves as a great example of how Alumasc's multitude of systems can be utilised alongside our long term partners, Tandragee Roofing and Graham Construction"**.

Alumasc Innovations

We are constantly advancing our product portfolio by enhancing the building envelope with innovations such as biosolar, CO₂-neutralising membranes, and materials with increased recycled content.

Our collaborative approach with all stakeholders enables us to address challenges effectively and achieve both environmental objectives and high-performance standards.

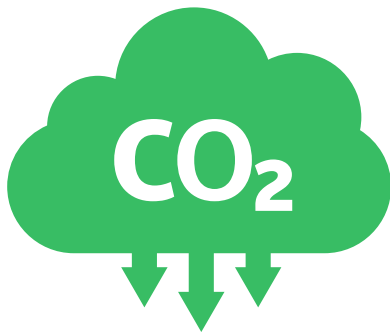
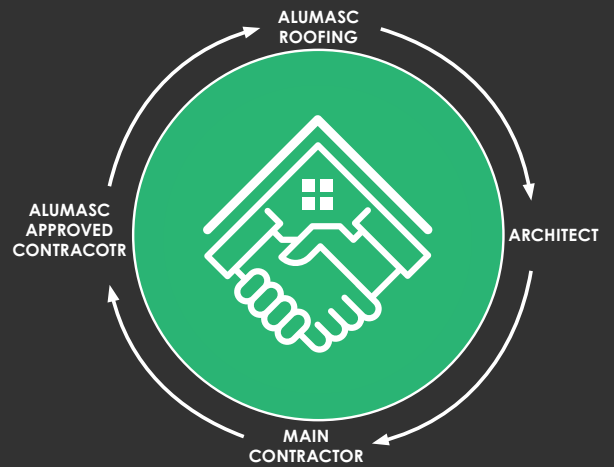
Project Information

Client: **Platform_**

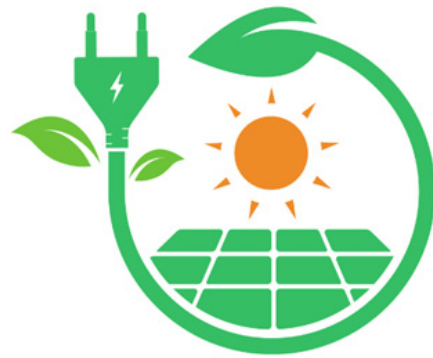
Architect: **JM Architects**

Main Contractor: **Graham Construction**

Alumasc Registered Contractor: **Tandragee Roofing**



Reduced Carbon Emissions



Photovoltaic Panels



Biodiversity Net Gain



Ethically Sourced Products



High Thermal Performance



Single Source Warranty