



**ALUMASC**  
ROOFING



## Creating Paradise: Alumasc Delivers for the Complete Building Envelope for One Chamberlain Square Paradise Project

One Chamberlain Square is the lead project in a wider vision to create Paradise in Birmingham—the most important development the city has seen in a generation.

With the help of Alumasc offering solutions for the entire building envelope, One Chamberlain Square is set to be a vibrant mixed use development that will not only be the new home of professional services firm PwC, but will endeavour to maintain a balance between busy urban hub and the natural world.

To do this, Alumasc provided a range of products and services encompassing the entire building envelope, specified by Weedon Architects. This included a Blackdown Extensive Brown Roof, applied over Hydrotech Hot Melt Waterproofing, alongside Harmer Roof Outlets and bespoke solutions from Roof-Pro, for building D: an eight-story commercial building over a podium car park. Inside, bespoke blinds by Levolux, also an Alumasc company, were installed.

“This is an extremely high-profile development, which demanded trusted, standard setting products,” **said Owen Doherty, Director at Weedon Architects and Project Architect for the venture.** “All systems decided on were chosen on quality, durability and enhanced design life compared to competition.”

### On the roof of Paradise

Blackdown's Extensive Brown Roof is a green roof in the making. Covering approximately 4000m<sup>2</sup> of roof space for this project, One Chamberlain's 'brown' roof is installed without plant life and will naturally seed from plant material that either blows in from the local environment or that is introduced by birds. In this way, it literally replaces the green space that has been taken up by the construction of the building it lies on, encouraging biodiversity by providing and strengthening habitats for wildlife local to the area, with truly local plant life.

Typically, the substrate is mounded to offer habitat variation, therefore the depth of the brown roof can vary be between 92-170mm and have a saturated weight of approximately 113-213kg per square metre, depending on the depths of the substrate.

Beneath this, Hydrotech MM6125 roofing, a hot melt rubber bitumen membrane, delivers sound structural waterproofing. The bitumen is heated and combined with a polyester reinforcement and protection sheet to form a weatherproof layer that has a 100% bond



**One Chamberlain Square**

# One Chamberlain Square

to prepared concrete surfaces. With no product failures in over 50 years, Hydrotech Hot Melt roofing is guaranteed for waterproofing integrity for the lifetime of the structure.

Working in tandem with each other, the Blackdown Extensive Brown Roof helps to extend and reinforce the life and guarantee of the waterproofing, offering a protective layer of natural insulation.

Giving his seal of approval, **Owen said:** "I only specify Alumasc hot melt at the moment and have done for many years. All products and systems chosen here have had zero product failures and I have never had any issues with technical specifications on previous high-profile buildings."

Only just slightly closer to the ground, controlled descent three-stop blinds by Levolux were installed, anticipating the sunlight that will beam into the glass fronted building upon completion and giving thought to end user comfort.

A roller blind system unique to Levolux, each blind is designed to automatically descend to one of three stops in a controlled manor when the operation chain is released, for a uniform look. Bespoke 'Z' brackets were fabricated to support the recessed headbox surrounding the blinds.

Levolux offer an extensive range of blinds ideally suited for offices, public buildings, hospitals, schools and other locations where glare control is important. Established 1984, Levolux became part of Alumasc in 2007.

## Providing efficient drainage

Given the huge expanse of roof space involved this project, effective flat roof drainage was essential. Harmer AV high capacity aluminium roof outlets were installed for this purpose. Suitable for all regular flat roofing applications with continuous membranes, these outlets are lightweight, durable, non-corrodible and have been proven to drain 40% more roof area than conventional gravity outlets, therefore further ensuring the long life and service of other flat roof systems.

Aiding project completion, Roof-Pro support systems were also tailored bespoke to meet the roof structure requirements. Free-standing support and access solutions were devised that would allow work to be carried out safely, efficiently and without causing damage to any of the roofing

systems being installed.

## A word from the contractor

**Christian Bradley of Briggs Amasco, who installed the roofing, commented:**

"One Chamberlain Square and the surrounding podium waterproofing form part of the largest construction programme in Birmingham. We are extremely proud to be working on this landmark project.

"The products and systems installed all have long legacies of successful projects behind them, and there are no better guarantees than real results. They also offer excellent value for a competitive cost. These are just a few of the reasons why we love working on Alumasc projects. Alumasc offer a single source for all solutions, bespoke design detailing and the technical support is always on-hand when you need it."

Completed in autumn 2019, One Chamberlain Square forms an integral part of a masterplan redevelopment that will transform part of Birmingham City Centre.

