

Darwin House, Bromley, London

Located within a bustling part of Bromley, London. Darwin House is a residential cul-desac comprising a cluster of apartments within a short distance of Anerley and Crystal Palace.

After residents reported major leaks, which resulted in apartments being evacuated, the Alumasc team were instructed to deliver an urgent solution.

Firstly, the client instructed Alumasc to survey the roof and deliver a recommendation to solve the water ingress issue. Secondly, Alumasc were asked to suggest a suitable fixing method for a renewable energy source in the form of solar panels.

Solution

The Alumasc team identified that water was seeping into the 400m² roof through a number of penetrations, over 95 in total. After a full investigation and consultation with the client, it was agreed that stripping the existing roof back to the deck and re-waterproofing using the Alumasc Euroroof Torch-On system would be the best solution.

Subject to the highest levels of certification and testing, the Alumasc Euroroof Torch-On system is fully adaptable to meet the requirements of this project. This proven solution is used across all types of building applications in both refurbishment and new-build.

The system is not only high performing but also extremely durable. It comes with an impressive 25-year guarantee. This assured the client that our range of products are the very best available.

During the client consultation it was also gareed that Alumasc ProSolar; a nonpenetrative photovoltaic mounting system specifically designed for mounting the proposed solar panels would be included within the specification.

The priority was to make the roof watertight again. Euroroof Torch-On with its premium torch applied reinforced APP polymer modified bituminous waterproofing membrane, underlays, insulation boards and air and vapour control layers (AVCL) solved the issues with the existing roof.

Once the structure was watertight, the team were able to install ProSolar to the newly refurbished roof. ProSolar is a non-penetrative mounting system which can be installed without the need to ballast or mechanically fix into the underlying roofing membrane. Without the need for further ballast, the system adds minimal load to the building. The framing structure consists of 92% aluminium resulting in the system being lightweight, strong and resistant to corrosion.

Challenges

The damage to the original roof was extensive. Stripping the roof back to the deck, fixing 95 penetration points, and the installation of the new system all came with different challenges. As with any residential project, time was of the essence as the residents needed to be back in their properties as soon as possible. Working in close partnership with the client and roofing contractor, the Alumasc team delivered this project in 8 weeks.

High Performance and Durability

The combination of Alumasc Euroroof Torch-on with its high performance and increased insulation properties, together with the installation of Alumasc ProSolar, means the residents of Darwin House can enjoy their homes again with the added benefit of lower energy costs for many years to come.

