



Diamond Offshore Drilling, Aberdeen

Winner of the NFRC 2022 Scottish Roofing Awards – Reinforced Bituminous Membranes.

The best of roofing projects in Scotland were celebrated at the NFRC Scottish Roofing Awards on 28th October 2022 at the Grand Central Hotel in Glasgow. The judges rewarded standout projects for quality workmanship, innovation, strong supply chain management and impressive responses to challenges on the project.

The Diamond Offshore Drilling project came first place in the Reinforced Bituminous Membranes category, for its impressive example of technical innovation to find a solution for the client.

Project

Alumasc Roofing was selected to carry out a full roof refurbishment at the Scottish headquarters of contract drilling services provider, Diamond Offshore Drilling. The site comprises offices contained within a two-storey building topped by a metal roof which had become severely corroded. This compromised the roof's insulation, with other issues such as excessive leakage, major condensation and poor termination at drainage points resulting in disruption to day-to-day operations for office staff. As a matter of urgency, the client required a roofing solution that eradicated the risk of water ingress and condensation whilst improving the building's overall thermal performance. Thanks to the company's decades of experience in supplying roofs that meet a range of complex requirements, Alumasc Roofing had the ideal solution.

Innovative Design

The 1,200m² roof's complete redesign was necessitated by the existing system's severe corrosion and failure. The client, considered numerous replacement options, including over-sheeting the building with a metal roof and providing a painted finish. In conclusion, Alumasc Roofing devised a hybrid option that was fairly unique in its methodology, and comprised a plywood frame overlaid with Alumasc's Euroroo Mono bituminous system. This built-off-frame solution was seen as the most credible design in terms of robustness, the thermal outcomes it facilitated and the time and cost-effective speed with which it was delivered.

Installation Benefits

When it came to the installation, the existing roof was overlaid with a new structural timber deck. This was mechanically-fixed to steels below the existing metal roof, allowing the installation of the new, bituminous roofing system from Alumasc Roofing. The benefit of this option meant that the air and vapour control layer (AVCL) could be installed directly to the timber deck; thus providing immediate waterproof protection to the structure.

Alumasc's GTF PIR Insulation was PU adhered to the AVCL in a single layer built-up roofing system. The Alumasc Euroroo Mono cap sheet was also bonded in PU adhesive and hot air gun-welded at all termination points. Detailing to the roof was achieved using Alumasc's Euroroo Self-Adhesive Underlay and Euroroo Self-Adhesive Cap Sheet.

Sustainable Option

The roofing system was installed totally flame free, mitigating the risk of fire and resulting in a low-energy application. In addition, the roofing solution has a proven life expectancy in excess of 25 years and after this period, it can be overlaid with another waterproofing layer to give the roof an additional lease of life, this eliminates the need to send the existing system to landfill.

Assurance

Alumasc Roofing's design and technical expertise was integral to the successful roof refurbishment works at Diamond Offshore Drilling. The system itself came with a 25-year system warranty, adding to the client's peace of mind that their new, hybrid solution will keep their flagship office building warm and dry for many years to come.

Project Data:

Completion: June 2022

Building Type: Commercial

Product Application: Euroroo Mono & Euroroo Self-Adhesive

Approvals: BBA Certified & Fire Classification of B_{ROOF} (t4) in accordance with BS EN 13501-5

