

A CO₂ neutralising roof? Dundee University benefits from olivine roofing from Alumasc Roofing Systems

One of the busiest buildings at the University of Dundee was able to benefit from a complete replacement of its waterproof roofing with Alumasc Derbigum Olivine roofing membranes.

The August 2018 project ran for six weeks and was completed on time, without any complications, after a thorough site survey to correctly identify the project needs.

During the survey, it was discovered that the roofing in place had exceeded its lifetime, and was in very poor condition.

After receiving specifications from Alumasc, the client decided to take the opportunity to install a high-quality roofing solution that would also contribute positively to the environment.

"Olivine membranes are extremely special," explained Permatop Roofing Director Jim McVeagh, who headed up the project. "Olivine is a highly effective, durable waterproofing solution for roofs which also actively purifies the air by neutralising CO₂ in rainwater."

Olivine membranes use a naturally occurring mineral upper layer that neutralises the most prevalent greenhouse gas via an irreversible chemical reaction when it comes into contact with rainfall. This technology was developed with the objective of contributing positively to the on-going challenge that climate change poses.

The Olivine grains within the membrane decrease in size with each reaction, however, once installed, clients can rest assured that they'll continue to work for up to 30 years before the grains will have completely reacted. Each membrane is 100% recyclable and British Board of Agrément (BBA) approved.

1kg of Olivine granules have the capacity to neutralise 1.25kg of CO_2 , meaning over its 30-year life time, this 600m2 project could potentially absorb nearly 3500kg of CO_2 .

Alumasc Derbigum Olivine roofing is ideal for warm roof applications. It's high melting point ensures membrane stability in the hottest weather whilst the polyester/glass fibre reinforcement provides high tensile strength. In the middle of the summer, this was an extremely important consideration for



"Personally, I think the technology that goes into Olivine is amazing," Jim commented. "Anyone who chooses to install Olivine on their rooftop is actually doing something positive for the environment, while also ensuring a high quality, built-to-last waterproof solution for their roof. It couldn't be easier, so why not?"

Approved by the BBA (Certificate No 86/1593), all Derbigum roofing membranes, including underlays and vapour barriers, are CE marked, with Declaration of Performance (DoP) certificates available.

Alumasc Roofing carefully carry out site surveys, and offer specifications, CAD/BIM calculations and designs, site reports and monitoring and roof maintenance to ensure that each and every project is executed and maintained to the highest standard.

Permatop Roofing are an approved contractor to install Alumasc products, and won the tender for this project based on their experience and expertise in this type of refurbishment work.

"Permatop will only work with the best quality roofing products," said Jim, "which is one of the reasons why we work with Alumasc: the products are of excellent quality, great to work with, and the company is overall very reliable."

