

Alumasc's Carbon Dioxide Neutralising Roofing Helps NTU Stay One of the UK's Most Environmentally Friendly Universities

Alumasc Derbigum Olivine roofing absorbs and neutralises  $\mathrm{CO}_2$  on contact, as it falls in rainwater. This ground-breaking technology has been used in the recent redesign and refurbishment of Nottingham Trent University's Clifton Campus Library, which now features over  $1000\mathrm{m}^2$  of Olivine, providing a waterproof, BBA approved roofing solution.

As one of the UKs most environmentally friendly universities, NTU has a reputation to uphold. The UK market for green construction projects has grown significantly in the last 10 years and is poised to grow further in the next three. As society's collective environmental conscience grows more aware, developments which design with environmental concerns in mind have become more revered. This seems to be the case increasingly so with students and younger generations.

As well as teaching the effects of positive actions towards the environment, NTU has decided that the best way to impress the importance of their students is to demonstrate it in their campus buildings.

M & J Roofing installed the membranes, after it was identified as the most appropriate waterproofing solution that would also offer the sought after added environmental benefits. As a bituminous felt system, Derbigum Olivine is 40% recycled, therefore from an environmental point of view, it has an edge over many competitor brands.

"Alumasc Derbigum Olivine roofing contains a naturally occurring mineral upper layer that irreversibly neutralises  $\mathrm{CO}_2$  that falls in rainwater, on contact," **explains Ashlea Williamson, Marketing Executive for Alumasc Roofing.** "When the rainwater rolls off the roof and eventually reaches the drains, it's carbonfree. The olivine grains decrease in size with each reaction, however are large enough to last 30 years plus before having completely reacted. It's construction industry science at its finest!"



## **Nottingham Trent University**

"The membrane itself is guaranteed for up to 50 years, carrying the longest British Board of Agrément (BBA) durability statement in the UK. It's high melting point and polyester/glass fibre reinforcement provide high tensile strength and dimensional stability even in the hottest weather."

This refurbishment also included the specification of Alumasc Rooflights and Harmer aluminium Roof Outlets, coupled with GX Pressed Aluminium Gutters and Heritage Circular Pipes, ensuring adequate drainage could be achieved for the new roof.

Alumasc Rooflights provided an ideal solution to allowing natural daylight into the building from above. The unique kerb design incorporates both security and waterproofing to create a reliable, safe and secure rooflight, allowing horizontal termination of the waterproof membrane. This makes water penetration virtually impossible. The domed glazing is moulded from Marlon FSX Longlife, premium quality solid polycarbonate, which has an impact resistance up to 200 times that of glass.

Technically sophisticated, Harmer AV high-performance aluminium roof outlets are chosen for this project as they guarantee a trouble-free performance and are especially suited to flat roofing applications featuring continuous membranes.

Harmer AV roof outlets combine innovative product design with full industry compliance to meet the needs of rainwater drainage in any construction project, with the ability to drain up to 40% more roof area than conventional gravity outlets. Further to this, their lightweight, durable, non-corrodible design means that they will do so for up to 50 years.

GX Pressed Aluminium Gutters are robust box section gutters designed for traditional wet jointing on site. They're especially suited

to applications where maximum capacity gutters are required. For the very large drainage area of the campus roof, they were perfect.

Designed to fully accommodate thermal movement at every joint, they are lightweight, durable and noncorrodible, and, upholding the environmental prerequisites of this project, they are 100% recyclable.

Finally, Heritage Circular Pipes are available in 4 pipe diameters and 3 pipe lengths, together with a complete range of fittings. Can be factory finished to replicate cast iron or with BBA certificated powder coatings in a range of colours.

