

Your Complete Roofing Solution

Environmentally Focussed | Responsibly Sourced | Ethically Driven



Galileo Multi Academy Trust

Galileo Multi Academy Trust are a leading provider of education, recognised for their core values, ensuring each pupil thrives and develops a love for learning. With a family of ten primary schools all in Redcar and Cleveland, each have their own distinctive ethos and character, all with children at the heart of everything they do.

The Galileo Trust have been working alongside property consultants Sanderson Weatherall as part of a Planned Preventative Maintenance programme, to develop the budget requirements for the next 5 years. Alumasc were commissioned to survey five of the ten schools: Galley Hill Primary School, Ings Farm Primary School, Westgarth Primary School, John E Batty Primary School, and The Lakes Primary School. The objective was to identify potential issues with the buildings and propose appropriate solutions.

After a lengthy consultation and survey period, each project came with quite different challenges, however due to the wide range of products available in our portfolio, a solution was found for each of the schools.

Enhanced Environment For Education

Galley Hill Primary School, Ings Farm Primary School, and Westgarth Primary School.

Products: Derbigum Olivine built-up warm roof system, Alumasc Rooflights, ProDrain Outlets, and Alumasc gutters.

In terms of the brief, all three schools were very similar. The trust wanted a watertight roofing solution that was durable and enhanced the environment for the attendees, by increasing access to natural light.

Our technical team surveyed the roofs at **Galley Hill Primary School (1,600m²)**, **Ings Farm Primary School (900m²)**, and **Westgarth Primary School (1,275m²)**, and began to identify areas of failure.

Matty Hyson, Regional Manager for the North & Midlands, Alumasc Roofing, "Our reports advised full removal of the existing waterproofing systems and installation of Alumasc's environmentally focussed Derbigum Olivine waterproofing solution, alongside complementary rainwater products. In addition to this, Alumasc's registered contractor installed several new rooflights across all projects to capture as much natural light as possible. The roof at Westgarth Primary School was designed to divert rainwater into ground level water butts for the school to water their gardens and allotments with."

Derbigum by Alumasc's most environmentally focussed product is Derbigum Olivine. Olivine (magnesium iron silicate) granules cause a chemical reaction in CO₂ in rainwater which converts it to harmless silicon dioxide (CO₂, i.e., sand), magnesium carbonate (MgCO₃, i.e., inorganic salt) and water. One square metre of Derbigum Olivine will neutralise approx. 1.75kg of CO₂ over its lifetime.

Our technical experts were able to design a solution to meet warranty and quality expectations of the trust. The system provides a waterproofing solution and increases the thermal efficiency of all buildings. With the addition of the rooflights we were able to flood the structures with natural light, creating a bright interior space for the pupils, teachers, and visitors to the school.

Matty adds "We have calculated that the Derbigum Olivine systems will neutralise 2,800kg of CO₂ at Galley Hill Primary School, 1,575kg at Ings Farm Primary School, and 2,231kg at Westgarth Primary School. All projects have a 35-year warranty."

Another added benefit to using Derbigum by Alumasc is that the system has a life expectancy of up to 50 years and after this time it can be overlaid using Derbigum by Alumasc membranes giving the system a lifespan up to 100 years. The Derbigum Olivine waterproofing solution will help the trust work towards its' carbon neutral targets. Installing a high-performance waterproofing solution that carries a BBA certificate confirming its' exceptional service life, means less landfill and no more leaks."

Challenges

To ensure the trusts maintenance programme ran to specified timescales, we prioritised areas in urgent need of repair to contribute to the trust's budget planning process. Areas of the roof had to be adapted due to complex detailing and low thresholds.

David Fairley, Partner, Sanderson Weatherall LLP commented "Over the last 2 years we have worked closely with the Alumasc team to make sure our programme of preventative maintenance runs smoothly for the trust."

Tim Bethell, Headteacher, Ings Farm Primary School, "The Derbigum Olivine range provides fantastic sustainability benefits for the school, especially with energy crisis at the forefront of our minds, we feel by installing a quality product, this guarantees peace of mind for the academy."

Once the project ended, in a bid to further the green credentials of the schools, a cherry tree was planted in a project coordinated by Alumasc Roofing, property consultants Sanderson Weatherall and Galileo Multi Academy Trust.

Strength and Aesthetics Combined



John Emmerson Batty Primary School

Products: Airtile and Caltech Alpha

The school required a new roofing solution that was quick and easy to install and gave extra peace of mind with a longer warranty than traditional pitched products.

Working alongside experts in building consultancy Sanderson Weatherall, a pitched and flat refurbishment solution was necessary with the addition of Alumasc rooflights to increase the amount of natural light for the pupils.

David Fairley, Partner, Sanderson Weatherall LLP, "Airtile was the obvious choice for this type of educational refurbishment. Airtile has the advantage of giving a traditional appearance

whilst being guaranteed for 40 years against weather penetration. It was a pleasure working onsite with both the Wensley Roofing and Alumasc teams, working on any refurbishment comes with challenges and the regular reporting from Alumasc ensured this was a smooth process."

Strength and Performance

The aesthetically pleasing Airtile system is a versatile, simple, and elegant modern-day version of a traditional slate tile. 100% recyclable it has all the characteristics of a traditional roof tile with authentic finish and riven edges. However, due to its ground-breaking design, unlike a normal roof tile it will not crack, break, chip or delaminate.

Manufactured from Lightweight Aluzinc Steel (up to seven times lighter than a traditional tile) gives the product excellent and long-lasting strength and performance, far exceeding anything that has gone before it.

Challenges

Critical to the project strategy was ensuring the safe removal of the original asbestos tiles. Wensley Roofing Ltd executed a sound plan to ensure their safe removal and disposal.

James Roy, Quantity Surveyor, Wensley Roofing Ltd, "It's been over two decades since the use and import of asbestos has been banned in the UK and we see many refurbishment projects like this. Critical to this type of job is designing a safe access point and removing the tiles intact following asbestos removal guidelines, ensuring the safety of the employees and pupils.

Matty Hyson, Regional Manager for the North & Midlands, Alumasc Roofing, "Safe removal of the original roof was a huge component to the success of this project. Alumasc provide a total design service and only work with our registered contractors to ensure the quality and safety of our projects. Airtile and Caltech Alpha worked together as a great combination for the pitched and podium areas. Caltech Alpha was the perfect choice for the school setting because it is an extremely low odour, single component product that requires no mixing and is flame-free.

A Mile of Guttering Waterproofing

The Lakes Primary School

Products: Caltech UV & GRP Trim

Our condition report showed significant areas of failure caused by poor detailing across the school's internal guttering system which spanned over a mile.

The trust urgently required a quality, non-disruptive waterproofing solution. We were able to design a refurbishment plan using Caltech UV and our range of accessories to minimise disruption to the pupils.

Liam Jackson, Northern Technical Manager, Alumasc Roofing said, "Caltech UV was ideal to give this guttering system an extra lifeline."

Caltech UV is applied in liquid form in two layers with an embedded reinforcing glass fibre matt to form a seamless, durable, smooth waterproof finish. With 20 years waterproof protection, Caltech UV gave this roof an extended life, meaning no need for a roof strip and therefore less landfill. The product is quick and easy to apply so there was no disruption to the operation of the school.

Challenges

Matty Hyson, Regional Manager for the North & Midlands, Alumasc Roofing, "The application of the Caltech liquid is usually very quick, but we factored in additional time to accommodate the tight details all around this uniquely designed roof.

Sarah Hindmarch, Galileo Trust, "Matty and the team walked us through every step of the process. From the design and specification, a competitive cost breakdown, right through to site support and sign-off."



Collaboration

Working together with the trust and our approved contractors we have delivered a single source solution across several different projects. All projects come with their own specifications, objectives, and challenges. By utilising our expertise, working with our approved contractors, and applying our groundbreaking product portfolio we can deliver impressive performance, high-tech design, and exceptional customer service to ensure we exceed the expectations of the customer.



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