

St Marys Catholic Voluntary Academy



Matthew Ling Photograp

Construction is now complete on the innovative new eco building for a Derby primary school following a devastating fire that destroyed the previous school. St Mary's Catholic Voluntary Academy is the UK's first biophilic school and is part of a pilot scheme for the Department for Education.

Biophilic design is a concept used within the building industry to increase occupant connectivity to the natural environment using direct nature, indirect nature, and space and place conditions. Biophilic design focuses on connecting those inside with nature, with the goal of promoting physical and mental health. The new building is designed and targeted to be net zero carbon in operation which means that the amount of carbon emissions added is no more than the amount taken away.

Innovaré Offsite collaborated within the full design team to support design, engineering, manufacture, supply, and installation of the full sustainable superstructure. The school, constructed in timber has been designed to achieve prominent levels of insulation and utilises Innovaré Offsite's Psi-FAST panelised solution developed to achieve a full structural envelope combining to bring sustainability and full fire compliance. Psi-FAST panels have been developed using market research and rigorous testing for higher-performance integrated systems delivering fire safety, thermal, and acoustic insulation with loadbearing capabilities. With an A1-rated (non-combustible) board and insulation, class 0 surface spread of flame rating, and 60 minutes of standalone fire resistance, Psi-FAST technology has provided a safe and sustainable solution. This project exemplifies the development Innovaré has undertaken to advance the application of the Innovaré offsite manufactured Psi-FAST system.

The completed St Mary's Catholic Voluntary Academy, consists of a primary school and nursery and is a single storey, made up of a series of pavilions arranged along a central canopy. In the design, each age group - early years, infants, and juniors- has a practical shared learning resource space. In addition, there is an entrance building featuring the hall and communal areas. The buildings are naturally ventilated with photo voltaic solar panels and heating via air source heat pumps. Roofs are green wildflower seeded to maximise biodiversity and local ecology.



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Project	St Marys Catholic Voluntary Academy
Client	Department for Education
Contractor	Tilbury Douglas
Architect	Hawkins Brown Architects
Value	£12m
Location	Derby, Derbyshire.
Completion Date	June 2023
Innovare duration onsite	12 Weeks
GIFA	2300 m ²
Framework	This is a DfE pathfinder project – the UKs first Biophilic school.
Sustainability	Net Zero Carbon in operation
Innovaré System	Psi-FAST



Tilbury Douglas's Project Manager, Neil Holland, said:

"I have previously delivered six school projects for the DfE. This is the first time I have used a SIPs system, and it has been a real gamechanger.

The project is moving at considerable pace and the quality that is being delivered is excellent and complementary to our Tilbury Douglas 'Right-First Time' approach."