

Broxbourne School

Project	Broxbourne School	Value	£28m
Client	Chase New Homes	Location	Broxbourne, Hertfordshire
Contractor	Mid Group	GIFA	13,000m ²
Architect	Bond Bryan	Completion	2020



NEED

New school building projects come with a demanding list of expectations for building performance and speed of delivery. This was certainly the case with Broxbourne School, built to replace a secondary school whose site was sold for redevelopment. The new school also houses a community sports centre and music centre.

Offsite methods have proven their ability to deliver airtight and thermally-efficient new school buildings in timescales measured in weeks rather than months. The Broxbourne School demonstrated how these advantages are magnified when the architect, developer and specialist contractors work in close partnership with a track record of successful project delivery experience behind them.

SOLUTION

Having collaborated on several education projects, Mid Group, Innovaré and Bond Bryan have an established working relationship. This allowed the joint project team to quickly identify the most effective way to deploy offsite methods, including the Innovaré i-SIP System, to accelerate project delivery and deliver ambitious building performance outcomes.

Structural SIP walls were used for the teaching wings and SIPs were used as an airtight wrap around the steel carcass of larger spaces. External facades made use of

the brick slip system provided by Aquarian Cladding Systems.

Designing the optimum solution started with defining *what makes a good classroom*. It was then a case of working outwards; using the combined expertise of all partners to identify the most suitable methods and materials for each part of the structure.

OUTCOME

Precise project planning meant that the Innovaré installation teams were onsite for just 15 weeks to create a new school structure with a GIFA of 13,000m². The buildings are exceptionally thermally efficient with a U value of 0.2w/m²k and airtightness of 5m³/m²/h - these values are significantly below DfE targets and help to reduce energy demand and lower operational carbon. Extensive use of structural timber also reduced embodied carbon levels as well as significant sequestered carbon within the timber structure.

Delivering this level of real-world performance alongside time and cost savings is the product of close partnership working. In this environment, the collaborative team applies improvements identified from previous projects and resolves technical issues at an early stage. Because of the extensive pre-existing knowledge of the Innovaré product by everyone on the project it was possible to get it up and running quickly with no learning curve or secondary procurement.