

Scientia Academy, Staffordshire | Great Britain



Project Two-storey all-day school

Place Staffordshire, Great Britain

Construction 2014

Client Staffordshire County Council / Entrust

General contractor Seddons Construction

Execution of timber construction X-LAM Alliance

Architecture Entrust Design Consultancy / Staffordshire County Council

Use of BBS Hybrid construction consisting of steel beams with binderholz CLT BBS elements



The design objective of this all-day school was to provide added value for all children. This involved creating a good environment for teaching, as well as offering a 4D cinema, large recreational rooms, specially designed classrooms and a garden on the roof of the school building.

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This innovative building is built as a hybrid construction with steel beams and binderholz CLT BBS elements. Building Information Modelling (BIM) was used to ensure the precise fit and coordination of all work by the individual trades (steelwork, timber work etc.) This entails centrally filing a precisely detailed 3D model of the building and releasing it to the specialist trades involved. These specialist trades input their materials and all components into a central BIM file, reducing the risk of faulty design to a minimum from the outset.



All elements were delivered to site prefabricated providing multiple benefits:

- Precise prefabrication
- Production independent of the weather
- High quality standards
- Fast assembly
- Lower noise pollution on site
- Reduced waste on site

The building comprises seven two-storey sections, all connected to each other by a central space. The architects set great store by the position of the school complex and the walking distance to the surrounding residential districts, as well as by optimum learning and teaching conditions for students and teachers. All classrooms are designed to have the flexibility to accommodate teaching in smaller groups.

