

**LOCATION:**

Rainham Mark Grammar School  
Rainham, Kent

## Four Classroom Block

**CLIENT:**

Medway Council

**PROJECT SUMMARY:**

- New prefabricated four classroom art block complete with washrooms, office, plant room and circulation space
- Floor area 560m<sup>2</sup>
- 19 modular bays with canopy/overhang
- Photo Voltaic Modules / Solar Panels
- All groundworks, foundations and drainage
- M&E works including automated door access, fire and intruder alarms
- Completed November 2018
- Achieved EPC 'A' Rating (Score 13) – Energy Efficient
- Project value £980,000

**CHALLENGE:****Creating new art classrooms on a busy school site**

Rainham Mark Grammar School in Kent is an 11-18 selective school with 1400 pupils on the roll. This is a stimulating educational community focused on motivating young people to enjoy learning and make the most of their abilities. When the school wanted to build a new art classroom block to enhance creative options for pupils, modular building construction methods provided a fast and affordable solution, minimising disruption to learning processes.

Enviro Building Solutions delivered an ambitious and attractive modular classroom building project around a build schedule developed to match the operational requirements of the school. The end result is a four classroom block which has achieved an EPC 'A' rating based on build quality.

**EPC Rating A**

## PROJECT CASE STUDY



*Fantastic looking building that you wouldn't know was modular construction, delivered incredibly efficiently with clever programming and no disruption to the school."*

**Robert Banks**

Capital Project Manager, Medway Council



*A professional, pro-active and efficient organisation, on a school project with a restricted budget. Enviro worked very well in a live school environment, demonstrating very good communication skills with the school on a daily basis. This was a successful project which was completed on time and within budget."*

**Stuart Collingwood**

Director Building Surveyor, Bailey Partnership

### A building set in its own environment

This ambitious project consisted of the design and construction of a new four classroom art block complete with washroom facilities, offices, a plant room and circulation spaces. Located on a raised piece of land, the grass banking was originally specified as gabion baskets but the school preferred a more subtle approach, so Enviro Building Solutions created a stepped grass verge leading down from the building, inlaid with bench seats to optimise creative use of the slope. Large expanses of window add to the open, airy classroom spaces, with the exterior a combination of brick slip finish and Cedral cladding.

A total of 19 modular bays create the new building, which also features an attractive canopy to the main entrance forming an extension to the roof, supported by a cold rolled steel 'V' support. The structure uses a raft foundation with a suspended floor; Enviro worked to design in innovative detail to reduce the 'bounce' inherent in this type of floor by upgrading the way it was formed and constructed and modifying steelwork to enhance rigidity.

With the existing access road routed right around the school, Enviro Building Solutions worked with a second contractor engaged in another project for the school to create a new site entrance to facilitate both sets of works. Additional works included digging over 150m of trenching to route

cables to the plant room from an existing sports hall.

With the focus on sustainability, the team also installed a total of 66 photo-voltaic modules on the roof of the building to optimise energy efficiency and further reduce running costs for the building.

### Build schedule focused around health and safety

Enviro Building Solutions offered the client two potential construction programmes for this project. The first involved a commencement date at the start of the school summer holidays, continuing until the end of October, which had the potential for disruption to the school from the start of the Autumn term. The second option scheduled the full preparatory facilitating works over the summer holiday period, when the school was not fully operational, then total closure of the site until delivery and installation of the modular units during the October half term. Although this added two weeks to the proposed completion date, this was the option selected by the school to minimise disruption and optimise health and safety with the construction team active on site for only 9 operational school days - a significant achievement for a project of this size and complexity

**M&E works including automated door access, fire and intruder alarms and air conditioning, and the building – completed in November 2018 – has achieved an EPC 'A' rating.**



# enviro

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