

Case study – DfE

Extension to Kingswood Academy

A new Secondary School extension building constructed to the rear of the award-winning Kingswood Academy.

1. Project Context

This three-storey secondary school building provides two storeys of teaching space, staff offices, a ground floor glazed cafeteria, offering an additional 150 spaces for students.

The new building was developed to expand upon the oversubscribed and well performing Kingswood Secondary Academy, bringing the total pupil count up to 1300 students.

The extension was delivered by Esteem as part of the Hull City Council's Pupil Place Planning Project.

2. Design Objectives

The new extension building provides teachers and students with modern teaching and breakout / dining spaces, accessible to building users of all abilities.

Alan Wood and Partners (AWP) provided support to the client to ensure that they were able to deliver a BREEAM 'Very Good' facility.



Location:
Hull



Client:
Esteem, Sewell & Hull
City Council



Architect:
AHMM



Value:
£4.4m



Civil
Engineering

Structural
Engineering

Geotechnical and
Geoenvironmental

Modern Methods
of Construction
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3. Evidence of Compliance

Working alongside AHMM Architects, Esteem and the wider design team, AWP helped ensure that the new extension satisfied the DfE Standards and achieved Regulatory Compliance. Through regular design team meetings and reviews, the team ensured that the space planning, daylighting, acoustics, ventilation, safeguarding, along with the compliance with building regulations, fire safety and health & safety requirements of the school and development were all met.

4. Innovation & Best Practice

Key structural engineering solutions were required to provide the extent of open space at the ground floor level, which were designed to accommodate a large, open plan glazed cafeteria area. This resulted in a lateral stability challenge that was overcome by employing a diaphragm system to transfer forces back to stability cores located near areas of vertical integration at one end of the building and providing stiff frames to the other.

The temporary stability of the structure was also considered as part of the scheme, with temporary systems being designed and detailed by the AWP Structures Team to ensure that the structure remained safe and stable throughout the process of the build.

5. Stakeholder Engagement

AWP, Esteem and the wider design team worked with building users to ensure that the extension delivered on the requirements outlined by the brief, and generally providing a ‘sympathetic’ extension that mirrored the quality and modern functionality of the adjacent main building.



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6. Visual & Technical Evidence

Drawings & Plans: Floor layouts, elevations, and 3D visuals.

7. Outcomes & Impact

The extension delivers on its main objective in providing additional, much needed places to local students, whilst offering 12 classrooms, 2 offices and a large, glazed open plan dining space at ground floor.

This is a direct response to the school having achieved World Class School status and being one of the highest performing academies in the country.



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