



Location: Keyworth, Nottingham

The Brief

Elite Systems GB was appointed by South Wolds Academy to deliver a purpose-built modular education block that would support the school's need for increased teaching capacity while maintaining high standards for energy efficiency and design. The scheme was completed under tight programme requirements with minimal disruption to the live school site.

The new facility replaced older accommodation with a contemporary, fit-for-purpose building designed around flexible teaching space, full accessibility, and high thermal performance. Offsite prefabrication allowed the project to be delivered rapidly and efficiently, while the completed structure now forms a key part of the academy's long-term estate strategy.

- **Project:** Sixth Form Classroom Building
- Location: Keyworth, Nottinghamshire
- **Timeline:** Completed within one month from start on-site to handover, with works carefully coordinated around a live school environment to ensure zero disruption to teaching.
 - **Key Features:** Multi-classroom teaching block, accessible WCs, high-performance insulation, white and blue cladding, full turnkey package including planning and building control.

The Main Features

Outside

Hybrid Superstructure-

A robust two-storey hybrid timber and steel frame construction, backed by a 25-year structural warranty. Designed to provide durable, long-term performance for modern educational use.

Trespa Cladding-

High-quality Trespa panels chosen to complement the academy's existing branding and architectural style, ensuring a cohesive visual identity across the campus.

Solar Power for a Greener Future-

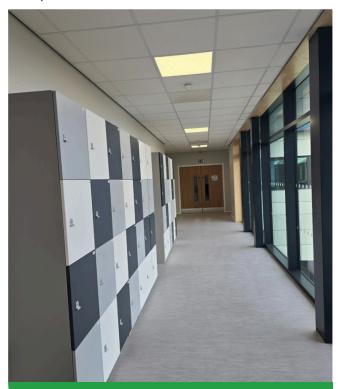
A 57kWp rooftop solar panel system provides clean, renewable energy—cutting down on emissions and supporting the school's sustainability goals.

Concealed Guttering-

A hidden rainwater management system integrated into the roofline, offering effective drainage while maintaining clean, uninterrupted architectural lines.

Spacious Two-Storey Layout-

The new building is spread across two floors, providing increased capacity for teaching, learning, and student support—all within a compact footprint that maximises available space on site.



Inside

Curtain Wall Glazing-

Striking internal glass curtain walls help create bright, open learning spaces, enhancing connectivity and allowing daylight to flow freely through both floors.

Dedicated IT Suite (91 m²)-

A fully equipped computing room with extensive benching and infrastructure to support digital literacy and cross-curricular technology integration.

DDA-Compliant Platform Lift-

A smooth, quiet platform lift provides step-free access between floors, ensuring full accessibility for students, staff, and visitors with mobility needs.

Inclusive WC Facilities-

Modern unisex washrooms designed for hightraffic use in educational settings, incorporating accessible and ambulant cubicles to meet current regulations.

Multi-Use Common Room (129 m²)-

Spacious and versatile, this area serves as both a dining and social space. Includes a mains-fed water cooler, vending machine, ample storage, and flexible seating arrangements to support student wellbeing.





Challenges

The project presented numerous challenges, which we addressed with determination and creativity. Some of the key obstacles included:



Complex Two-Storey Design

The two-storey layout of the building introduced additional structural and logistical complexities, particularly around alignment, load-bearing requirements, and internal circulation. Each floor needed to connect precisely with services such as electrical systems, plumbing, and the platform lift to ensure full functionality and accessibility across both levels. Our in-house design team tackled this by using advanced 3D Building Information Modelling (BIM) software to visualise and coordinate every detail of the structure before manufacturing began. This ensured exact alignment between ground and first floor modules and prevented issues during installation. Integrating the platform lift system also required early engagement with specialist suppliers to coordinate installation and ensure full DDA compliance.



Educational Specifications & Standards

Educational buildings are subject to strict regulations and must support a wide range of functional, safety, and accessibility requirements. From classroom dimensions to corridor widths, fire safety to lighting levels, every detail had to meet Department for Education guidelines and support effective teaching and learning. We worked closely with educational consultants, the local authority, and the client to ensure each space within the building was designed to meet specific curriculum needs. Classrooms were optimised for natural daylight, ventilation systems were designed for energy efficiency and comfort, and flexible layouts allowed for multi-use teaching environments. Additional requirements such as inclusive WC facilities, sensory-safe environments, and a dedicated wellbeing hub were all incorporated into the design.



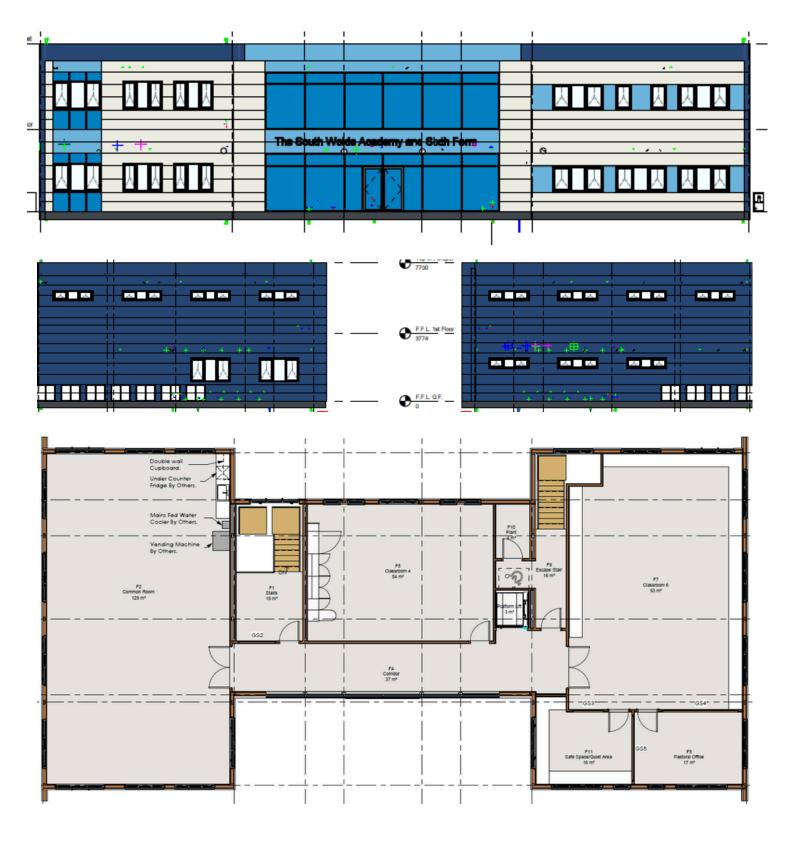
Live School Environment

One of the most significant challenges was constructing a new two-storey modular facility within an operational secondary school, without causing disruption to students, staff, or the dayto-day running of the school. This required a high level of planning, communication, and adaptability. To overcome this, we developed a carefully phased installation programme that aligned with the academic calendar, prioritising health, safety, and minimal disruption. Deliveries were scheduled outside of peak school hours, with key works taking place during holidays or quieter periods. Constant coordination with the school's leadership team ensured that access routes remained safe and unobstructed at all times, while noise and vehicle movement were managed to avoid interference with lessons or exams. The result was a smooth and nondisruptive build process that respected the school's operational needs.



Trespa Tones and Precision

The use of Trespa Meteon panels in a palette of blue tones, ranging from Powder Blue to Dark Denim, paired with crisp white detailing introduced both visual and technical challenges. Achieving consistent colour across varying shades required meticulous planning, particularly to balance contrast and maintain aesthetic harmony. The installation process demanded precise panel alignment, robust weatherproofing, and carefully selected fixing systems to ensure both durability and design fidelity. Further complexity arose from integrating the cladding with adjacent materials, including blue brick plinths and anthracite frames. To keep pace with the client's evolving vision, several design revisions were made, especially concerning panel layout and colour combinations, to deliver a scheme that was visually impactful and cohesively executed.



Built Around the Brief

Elite's in-house design team worked closely with Surveyors to Education Ltd and EMET to translate the academy's vision into a fully compliant modular scheme. Detailed architectural layouts and elevations were developed to meet curriculum needs while blending aesthetically with the existing campus.

Each module was precision-manufactured in a controlled factory environment and delivered to site fully fitted. On-site installation and commissioning were completed ahead of schedule, ensuring readiness for the September intake.



A Modern Learning Environment Without the Wait

Elite Systems GB delivered a future-ready modular teaching facility that now plays a central role in South Wolds Academy's campus offering. The two-storey building combines flexible classroom space, specialist learning zones, and support services within a contemporary, fully accessible structure.

Completed within just one month on-site, the project allowed the school to respond to increased demand without compromising day-to-day operations. The modular approach ensured minimal site disruption, faster delivery, and high-quality results, underpinned by durable materials, strong energy performance, and a low-maintenance finish.

With a layout designed to support student wellbeing and staff collaboration, the building reflects South Wolds Academy's forward-thinking approach to education and campus planning.

Key Outcomes:

- Full two-storey modular teaching facility delivered in just 14 weeks from concept to completion.
- Seven new classrooms, IT suite, pastoral office, and common room
- Inclusive design with platform lift, disabled WC, and quiet spaces
- Seamless integration of M&E, IT, and building services
- Durable, low-maintenance materials for long-term performance
- Safe and disruption-free installation within a live school environment
- Enhanced learning environment aligned with the school's growth plans

