

Ty Gwyn Special School

Project Name: Ty Gwyn

Sector: Education

Location: Cardiff

Client Name: Cardiff Council

Supplied by: Wernick Buildings

Accommodation Type: Rapidplan

Features: Classrooms, quiet rooms, sensory room, enhanced acoustic performance, impact resistant internal walls.

No. of modules: 18

Programme length: 20 weeks



Special Build for Special School

The latest addition to Ty Gwyn Special School may look like a normal school building, but it is packed with interesting features and was delivered using modern methods of construction.

The building was delivered by modular building specialist Wernick and was constructed using 18 individual modules which were manufactured in dedicated factory in Port Talbot, less than an hour away from the site. These were transported to site by lorry, then craned into position and bolted together to form the core of the building. The brick cladding and trussed roof were then added to the core to give a traditional construction appearance.

Manufacturing the building in a factory environment gave the project several advantages. Firstly, the building could be constructed at the same time as the foundations were being prepared, dramatically reducing programme length, particularly on site. Manufacture was also not affected by site conditions like the weather, making the programme even more reliable. This was vitally important for the school, who would need the building in time for the start of the new term.

Providing a robust building which would be both a safe and calming environment for Ty Gwyn's pupils who can sometimes present challenging behaviour, was important. This was reflected in the enhanced specification required by the council which Wernick embraced fully, enhancing their standard modular system to meet the requirements.

The painted internal walls were upgraded with impact-resistant plasterboard to better withstand the demanding classroom environment. The floor, apart from being fully non-combustible, was also enhanced to improve rigidity and acoustic performance. All the doors are also equipped with acoustic seals to reduce noise throughout the building and ALUMASC Safehinge anti finger trap system to avoid any opportunity for entrapment.

Acoustic performance was especially important for the withdrawal rooms off each classroom. These spaces can be used when a child needs a calming and safe environment. The walls and floor of these were padded to ensure child safety and were also equipped with an observation window and AV

system, allowing teachers to play music for the children from the main classroom. A ducted heat recovery system was employed in the ventilation in these rooms, and comfort cooling is used throughout the building.

The audio-visual system in the block is also a step above many standard classroom buildings. Aside from the withdrawal rooms and interactive whiteboards in each class, there is also a dedicated sensory room with controllable coloured lighting and interactive projections on the floor and wall which pupils can engage with.

All classrooms are also equipped with a DDA compliant toilet and shower room, as well as a 'nurse call' system to help staff in emergencies. Glazing throughout the building was also enhanced to reduce u-values and improve security by meeting Secured by Design standards. As standard the windows had toughened glazing inner and laminate glazing outer.

A spokesperson for Cardiff Council commented: ***"The Wernick team were excellent to work with from start to finish. Teamwork was at the heart of everything, and the team committed from the outset to deliver the project on time. Working relationships were excellent, and this facilitated first class communication and ultimately the delivery of a highly successful project"***