Case Study: Trumpington Meadows Primary School, Cambridge

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Architectural aluminium systems by Kawneer feature on a new primary school

Glazed elements by Kawneer have helped a visionary new primary school at Trumpington Meadows near Cambridge to achieve a BREEAM “Very good” rating.

Building: Trumpington Meadows Primary School
Location: Cambridge
Main Contractor: Willmott Dixon
Installer: JPJ Installations

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Kawneer glazing helps with a new school’s vision

Kawneer’s AA®100 zone-drained and AA®100 SSG (Structurally Silicone Glazed) curtain walling, AA®541 top-hung casement windows, AA®541 actuated windows at high level as rooflights and series 190 heavy-duty commercial entrance doors were specified for Trumpington Meadows primary school. The curtain walling, with 50mm sightlines, was installed by approved specialist sub-contractor JPJ Installations for main contractor Willmott Dixon on the main entrance and assembly hall while the 190 doors were used to give classrooms direct access to the outdoor space and the windows were used throughout the £8.5million building.

The new school comprises four Key Stage 1 classes for 120 children, eight Key Stage 2 classes for 240 children, two reception classes, early years accommodation, group activity spaces, learning resource areas, main hall and activity studio, catering facilities, administration and staff facilities, and community space. An extensive community and stakeholder consultation resulted in an adaptable, inclusive and visionary design with a strong understanding of the specific requirements of future pupils, staff and the community.

Kawneer was recommended by SCAPE for use with their system and provided the low U-value required, with the seamless combination of opening windows, doors and actuated windows meeting the brief requirements.

Following discussions with JPJ Installations the windows were designed to be attached directly to the timber SIPS panels. This resulted in them being installed early in the construction programme. Due to this the building was water tight much sooner than in traditional construction, allowing internal works to commence and ultimately a shorter construction programme to be achieved.

The large entrance foyer integrates the community, pre-school and school, reinforcing the community. From there, all elements of the building can be accessed, with views into the heart of the learning environment. The foyer has a six-metre glazed façade to maintain visual continuity between outside and inside space while the façade incorporates an expanse of Kawneer glazing to add transparency between the local centre and community space within the building.

The Trumpington Meadows site on 155 acres of the former Plant Breeding Institute was acquired in 2004 by the Trumpington Meadows Land Company (TMLC), a partnership between property giant Grosvenor and the Universities Superannuation Scheme (USS), one of the UK’s largest pension funds. TMLC signed an agreement in 2010 to give Barratt Homes exclusive rights for residential development on the Trumpington Meadows site. Barratt plans to build 1,200 new homes in a phased development programme over five years, the new school being part of that.

The classrooms at Trumpington Meadows were designed to achieve a level of good light distribution, with large picture windows spanning from floor to ceiling to the external façade, with high level clerestory windows bringing light into the deeper spaces.

The teaching accommodation was designed to maximise natural light and ventilation. Every classroom is cross-ventilated with a combination of manual low-level windows and automatic clerestory windows, and each classroom has direct access to outdoor space – a key aspiration of the Fawcett Federation and temporary governing body - to ensure the opportunity for free flow of movement, allowing flexible ways of teaching in both outdoor and indoor spaces.

Please contact our Architectural Services Team if you have a project you would like to discuss: Tel: 01928 502604 / Email: kawneerAST@arconic.com