## Case Study: St Catherine's Academy, Bolton



## Glazing systems from Kawneer feature on the new Bolton St Catherine's Academy

Kawneer's AA®100 curtain walling and slope glazing, AA®541 and AA®3110 windows along with AA®605 and series 190 doors feature throughout the £36million St Catherine's Academy, Greater Manchester.

**Building: St Catherine's Academy** 

Location: Bolton

Architect: Sheppard Robson
Main Contractor: Kier Construction



## Kawneer systems help light up UK's first super-school

Elements from all of Kawneer's portfolio of architectural aluminium systems have helped St Catherine's Academy, the UK's first super-school, achieve a BREEAM "Very good" rating.

The 16,246m² building was designed by Sheppard Robson architects to create a joint campus for the 1,160-student academy, which was formed in 2009 by the merger of Withins Secondary School and Top o' th' Brow Primary School, and Firwood School which caters for children with special education needs.

Their brief was to create an inspiring environment with a range of specialist facilities at the heart of the community, on a site which sloped over 37 metres from top to bottom. The result is a stepped building which appears to cascade down the incline, its size and scale broken down by the arrangement of the blocks.

Kawneer's AA®100 zone-drained curtain walling with 50mm sightlines, and AA®100 mullion-drained slope glazing as rooflights, were used throughout the communal areas, particularly the main dining space and central circulation spine, to create light and open spaces.

These were complemented by AA®541 top-hung casement and AA®3110 horizontal sliding windows (the former featuring a BRE Green Guide A+ rated frame\*) and AA®605TEPlus low/medium-duty swing doors and series 190 heavy-duty commercial entrance doors.

The Kawneer systems were installed on the steel-frame building for main contractor Kier Construction. The walls achieve a U-value of 0.28 W/m²K through double-leaf blockwork with 100mm of glass wool insulation within the partial fill cavity.

Sheppard Robson architect David Baldwin said: "The curtain wall interfaces with rainscreen cladding externally to all communal areas, creating a strong visual distinction from the teaching spaces in the building which are buff brick with Kawneer windows.

"The robust door sets to the main entrances are designed for high use and high impact resistance which is essential for school environments. Security was also a key issue so the building was designed to meet Secured by Design standards where possible."

Kier project manager Phil Jones said: "The Kawneer system complied with Kier education design standards and was proven technology from previous contracts including Litherland High School. From that experience we knew good technical support would be available."

\* Corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A+ (www.thegreenguide.org.uk, Element Number 1231500011)









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