



Project name - Our Lady Queen of Martyrs RC Primary School

Market sector - Education

Geographic sector - York

### Project details

This new build school project is the amalgamation of two local Primary Schools in the York area, Our Lady's RC, in Windsor Garth, and English Martyrs RC in Hamilton Drive. The school is nearing final completion and is due to open in January 2012. The design of the school incorporates various environmental features to provide a low carbon solution, including a ground source heat pump that serves an under floor heating system and a natural ventilation system in place of a mechanical arrangement throughout the building.

The School has achieved a BREEAM rating of 'Very Good' ensuring optimum environmental performance of the building.

### Project overview

Our design team at GDL Air Systems worked closely with SES (Shepherd Engineering Services Limited) to select the most appropriate ventilation method for each classroom. Our Intelivent wall mounted units and penthouse turrets were selected as the most suitable solution. The ventilation rate within the classrooms varies frequently throughout the day as the occupancy levels change, a controlled ventilation solution incorporating CO<sup>2</sup> and Temperature sensors was essential. Our system was also designed to work in harmony with the under floor heating system installed at the school. Our unique L shaped heating coil located within our wall units' heats the air as it enters the building when required, this not only works as a front line heating system but also prevents the under floor heating from working at full capacity to heat the incoming air. This provides a reduction in energy usage from both the ventilation and heating systems.



External Louvres supplied at the School

### Benefits of using GDL Products to the project

- Our system allows a controlled ventilation rate that is both cost effective and energy efficient.
- Our unique L Shaped heating coil eliminates the 'cold drop' effect that causes ground level drafts in winter.
- Our Intelivent Wall Units work in harmony with the under floor heating system reducing energy usage throughout the building.

### GDL products used on this project:

Intelivent Wall Units, Extract Louvers, Penthouse Turrets, Supply and Extract ventilation grilles throughout the school.