

Case Study - Claregate Primary School, Wolverhampton



New Caspian bring controllable heating throughout the school



The Client

Claregate Primary School in Wolverhampton is a school typical of its 1960's design and construction. With heat emitters dating from the time of construction and being made of cast iron they were at the end of their serviceable life. Taking up a great deal of valuable wall space and often hidden behind furniture to protect the children from their high surface temperatures they needed replacing.

The Challenge

A solution was needed whereby the old-fashioned cast-iron radiators could be changed for a more cost-effective, and safer for the children, solution. RMC Mechanical Services of Wolverhampton developed a heating scheme working out the heating requirements and heat loss calculations for the project. The old cast iron radiators offered little local control and often the classrooms were very hot, or not hot enough. In conjunction with the school management and the teachers and staff, Clive Jones, Director of RMC Mechanical Services, was able to develop and propose a scheme that would meet the needs of the teachers and pupils. In the summer of 2018 RMC Mechanical carried out the upgrade work to the heating system.

The Solution

Replacing the old-fashioned cast-iron radiators with Smith's Caspian UV fan convectors RMC Mechanical Services achieved a much more efficient heating system. Each classroom was fitted with a Caspian UV fan convector mounted on the ceiling and controlled by a wireless room thermostat to provide individual control for each classroom. The 2 main corridors (one upstairs and one downstairs) previously had 5 large cast-iron radiators each which took up much of the wall space and these were each replaced with a single Caspian UV fan convector which now provides uniform heat along the length of the corridors. This is where the children store their coats and now there is enough

wall space for everyone to store their coats and bags during school time.

The school hall has also benefitted with the installation of 3 Caspian UV fan convectors mounted high up to avoid damage during sports activity. They allowed the removal of several metres of perimeter mounted cast iron radiators. The new Caspian fan convectors have released extra space for school activities and taken away the risk of children being burned by the high surface temperature of the old radiators. The Caspian are controlled by a room thermostat that monitors the air temperature in the hall. The hall is used for many different activities, so it is important to be able to heat the space quickly when it's needed

Caretaker Eric Russell commented on the Caspian fan convectors "they certainly heat the classrooms very effectively, and it's amazing that just one Caspian is able to heat the corridors where there were 5 of the old radiators there before".

The Product

Caspian fan convectors have been specially developed for a wide range of applications in larger spaces and commercial environments. With the ability to rapidly heat large areas at low cost, Caspian commercial fan convectors are both practical and energy efficient. They can be also installed in an adjacent room, or storage cupboard, with the warm air outlets positioned at the rear of the appliance and ducted into the adjacent room such as a sports hall or even a narrow corridor, permitting an obstruction free wall space. They can also be supplied in any colour to meet the demands of the installation location. Fully compatible with renewable energy technology, such as ground and air source heat pumps, Caspian can also enhance your environmental credentials.

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Eric Russell | Caretaker