

Case Study - St Joseph's Roman Catholic church, Dorking



Smith's Caspians bring accurate control to church heating



Background

St Joseph's Roman Catholic church is in Dorking, Surrey. The old heating system was at the end of its serviceable life. Time had come to update the heating system and the decision was taken to undertake a full system upgrade which meant replacing the old boilers and heat emitters.

The Challenge

Rather than replace the existing heating system like for like the client was very keen to futureproof the heating system as much as possible. Key to achieving this was a heating system that could be adapted in the future, if necessary, to use a heat pump as the heat generator. It was also important to select heat emitters that wouldn't completely cover the church walls. Therefore, powerful enough emitters would be required to heat the large space quickly and efficiently whilst being able to provide background heat when the set temperature was achieved. A fully controllable heating system was also specified to minimise the energy costs. One of the other key requirements was a system that incorporated flexibility in fan speed control.

The Solution

Smith's worked closely with the long-established heating contractors, Cowley Group in Horley Surrey. Cowley Group are experienced in installing and maintaining church heating systems, as well as schools, hospitals and offices throughout South East England.

This heating refurbishment project entailed installing 2 new commercial boilers in the basement plant room along with new

pumps, valves, and pipework. In the ancillary rooms where there wasn't a need for fast heat up of large spaces radiators were installed. In the nave 9 Caspian FF180EC fan convectors were installed. These variants were chosen because of their impressive heat output, and because they have EC fans which can be finitely controlled to ensure a rapid heat up when required and then can be adjusted to run very quietly to maintain the required temperature avoiding a noisy distraction. This precise control was achieved by pairing the Caspian FF180EC fan convectors with an EC control system with master/slave controls installed. A 'master' control unit was installed in one Caspian fan convector with 8 'slave' units installed in the other 8 Caspians. A modification to the Caspian FF180EC units was to reverse the airflow so that the warm air is discharged from the lower vent to provide warm air at a low level.

The result is a heating system which fully meets the current client requirements with a fully controllable heating system able to heat the nave of the church very quickly when required, then able to quietly maintain the set temperature. The system is also future-proofed with the Caspian fan convectors perfectly suited to meet future needs if, and when, a heat pump is installed to replace the current fossil-fuel boilers.

Delighted with the solution that Smith's provided and the client is equally delighted with their new heating system especially the level of control they have with it



Products

Smith's 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 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 heat pumps, Caspian can also enhance your environmental credentials. Now available with Smart Control, Caspian, and other products in the range, can be controlled extremely accurately for time and temperature making it perfect for buildings that serve a varied community demand.

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