Case Study Ashlyns School, Hertfordshire



Shh! It had to be Caspian Low Level Fan Convectors for Ashlyns School library.



The Client

Formally a hospital, Ashlyns School was taken over by Hertfordshire County Council in 1951and became the first bilateral or partially selective school in Hertfordshire. It is a secondary school located in Berkhamsted, Hertfordshire and accommodates students from the age of 11.

The Challenge

The library was in desperate need of refurbishment. The old heating system consisted of three fan heaters and one radiator, all of which were very old and ineffective at achieving the temperature required to heat the library successfully. Due to their age, the heaters were not very nice to look at either and were covered in dust and dirt, so replacements were definitely required.

Safety was of paramount concern for the school, so the contractor had to ensure that the new heating system was safe to feature in a room where there are children present on a regular basis.

The Solution

Four of Smith's Caspian High Level fan convectors were originally chosen for this project, but because the existing pipework was unable to be changed, four of Smith's Caspian Low Level fan convectors were installed instead.

The Caspian Low Levels were chosen because of their heat outputs; compatibility with the existing heating system; and low noise. Four units were installed in different areas of the library to ensure that the whole space benefits from the heat when the fan convectors are in operation.



Fan convectors are ideal for schools because they are compatible with all types of wet central heating systems and they function equally efficiently connected to a conventional boiler or to renewable technology, such as biomass boilers or ground or air source heat pumps.

Also, their naturally lower surface temperature, which is inherent in all fan convectors, ensures that the units are safe should they come into contact with students.

The Products

Fan convectors operate via a heat exchanger and small electric fan. The heat exchanger is connected to a standard two-pipe central heating system which passes hot water through the heat exchanger, transferring its heat to the aluminium fins.

The fan draws in cooler air which is heated as it moves over the heat exchanger and is then expelled gently back into the room by the same fan. Unlike a conventional panel radiator, the fan convector provides more even temperature spread and much faster warmth. The small fan means that the heat produced is distributed using forced, rather than natural, convection and consequently this makes it far more responsive to thermostatic controls.

As with all Smith's products, the Caspians come with a free five-year warranty for parts and labour.

Safety was of paramount concern for the school, so the contractor had to ensure that the new heating system was safe to feature in a room where there are children present on a regular basis