



Maiden Erlegh School,  
Reading

**Building type:**  
Secondary school

**Technology used:**  
12 x ecoTEC plus 120kW  
mounted on a cascade rig

1 x VRC 630

**Installer:**  
Hydro Heating Solutions

### Project background

- Large school with 1,789 pupils
- Legacy heating system incurring high energy costs and low efficiency performance for busy educational establishment



### System specification

Maiden Erlegh School in Reading which has over 1,700 students, has relied upon two atmospheric natural gas boilers to supply heat and hot water to its staff and pupils for the past 20 years.

Conscious that the legacy system was both ageing and incurring high running costs, as well as having a detrimental environmental impact, the school investigated the advantages of installing a new efficient boiler system to tackle such issues.

In particular, the school management set about addressing four main objectives. They were to replace the existing system, reduce ongoing maintenance and running costs, build in flexible backup should the overall heating system ever fail, and provide fully automatic remote operation for different areas of the school.

After liaising with the school management, Vaillant, along with installation partner Hydro Heating

Solutions, proposed a specification that could satisfy the four identified objectives. The final recommendation was based on an overall heating system that included 12 powerful, high performing and cost effective ecoTEC plus 120kW output wall-hung boilers.

The school had requested the separation of the three main areas which had been fed from the main plant room and wanted individual plant rooms to serve the maths and science block, sixth form building and main school. Vaillant was able to accommodate this request thanks to the flexibility of the system. The proposed solution would enable the school to allocate zoned areas within the building, so should a problem arise with the system, normal heating operation can be maintained in the areas which are not affected. In addition, a new networked control panel was installed to provide full remote control of the heating system on-site.

## Outcome

The installation was undertaken in a phased manner to ensure that the school could still be kept warm during the changeover from the old system to the new system and that any downtime was kept to an absolute minimum.

The busy school now has a fully operating, reliable, networked, energy efficient and flexible heating system courtesy of Vaillant's ecoTEC plus technology.

Floor space within the main plant room has been maximised due to the compact design of the ecoTEC plus wall-hung boiler solution and this has provided additional space which the school is currently utilising for the development of a new gymnasium facility.

John Bailey, Sales Director of Vaillant Commercial Systems adds: "Maiden Erlegh School worked in partnership with us from tender stage to completion. It was great that they engaged directly with us as the manufacturer and by working with our installation partner Hydro Heating Solutions, we could ensure the products were perfect for the installation. The ecoTEC plus wall-hung boiler range is very versatile and ideal where space is an issue but large outputs are required. In addition, the ease and speed of positioning the rig kits and then placing the boilers into position helped to reduce the system's downtime and ensure there was minimum disruption to the school."



## Why Vaillant?

Ron Edwards  
Site Controller  
Maiden Erlegh School

"With the installation there were a number of challenges to overcome, so we had to be very mindful about the size of the rig and the boilers. For example, the plant room was 1200mm below ground level so the weight of the appliances was an issue to minimise the manual handling complications and the client was also looking to retain as much of the available floor space for future development. However, working with Vaillant and utilising their flexible rig kit and flue systems, we were able to overcome the installation challenges with ease."

"Following the installation of the new heating system on-site, the school is benefitting hugely from a future proofed, highly energy efficient solution. We now have in-built system flexibility so that different areas across the school can operate independently should there be any issue with the main plant room. We did not opt for the cheapest possible answer, but instead trusted Vaillant's expert recommendation for the best solution for the project."

"We have already seen our gas energy consumption levels reduce due to the

efficiency of the Vaillant ecoTEC boiler technology and over time expect to see our ongoing running costs continue to fall. The boilers are compact and the system easy to manage. We have been able to use space which has been generated by the smaller design of the plant to build a new gym facility which will be a great new asset for the school's pupils."

"We now have peace of mind that the heating and hot water requirements for the school are taken care of for the foreseeable future and all the original objectives when we specified the system have been satisfied. We are delighted with the system Vaillant has installed."

Phil Kearn  
Hydro Heating Solutions

"We've fitted a large number of both Vaillant's domestic and commercial boilers, so we have great knowledge of their products and also reassurance of their reliability post installation, which is why we were confident in the specification. The team at Vaillant also provides first class support throughout the entire process, from the initial contact for the product specification through to the commissioning."