## Westbrook Lane Primary School

Enhancing energy efficiency and ensuring compliance with TM44 Air Conditioning Inspections.





Westbrook Lane Primary school in Leeds has three split air conditioning systems that serve its Library, IT room, and a classroom. The school engaged Zenergi's technical division to evaluate its need to comply with TM44 Air Conditioning Inspections.

### TM44 compliance

Schools with air conditioning systems with an effective rated output of more than 12kW are legally required to ensure compliance with TM44 Air Conditioning Inspections. This includes systems consisting of individual units which are less than 12kW but whose combined effective rated output is more than 12kW.

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A TM44 regulation inspection is where an accredited assessor is appointed to carry out an inspection of the air conditioning system. The assessment will review the efficiency of the system, check for faults, and provide advice on how to make it more efficient to reduce the costs involved in running it.

Following the inspection, a full report will be provided detailing findings, faults, and recommendations. Inspections are required every five years to remain compliant.

### TM44 compliance at Westbrook Primary School

The combined cooling capacity of the air conditioning system at Westbrook Lane Primary is 26.8kW which is over the 12kW qualification threshold required for legal compliance with TM44 regulations.

Following a comprehensive site survey, the compliance certificate and report were produced and lodged onto the central register. The survey assessed key questions set when inspecting the cooling plants, terminal points, system controls and maintenance. For Westbrook Lane Primary, this resulted in 25 recommendations for improving efficiency of the air conditioning systems.

### The survey identified

25

recommendations for improving the efficiency of the air conditioning systems

66

With the price of electricity increasing, any saving is vital to the school budget.

Your energy report certainly provided us with clarity on how much our Air Conditioning systems cost us to run and where we can invest to make savings.

Thank you.

Vicky Bray School Business Manager Westbrook Lane Primary School COMPLY

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### Added value

The format and the method of presentation of the report is standard and set by the Government. However, we believe that the output from the compliance report should go a lot further by providing customers with more valuable data. This is why our TM44 inspection service provides a supplementary energy report to provide the savings available for each of the recommendations identified in the report. The information is provided in a much more reader-friendly way so that it is easy to understand how much money each recommendation could save.

### Did you know?

The refrigerant in all air conditioning systems is thousands of times more damaging to the ozone layer than Carbon Dioxide should it leak. This is why it is vitally important to maintain compliance with TM44.

We can help you with tendering for an air conditioning upgrade to benefit from the energy efficiency of a more modern system to save your school money. We can even provide a complimentary TM44 air conditioning inspection when you upgrade, allowing you to benefit from no upfront TM44 fee; and annual savings on electricity, while achieving compliance with the legislation. This case study shows that even with small air conditioning systems, attractive financial savings are achievable - savings of 50% in the case of Westbrook Lane Primary School.

### Key data

Annual operational cost of the air conditioning systems:

# £6,952

Total system global warming potential equivalent:

 $17 \text{ tCO}_2 \text{e}$ 

Average Energy Efficiency Ratio of the air conditioning systems:

2.7 (D)

Annual saving of the largest opportunity:

£3,476

