

TM44

Inspection requirements
and regulations guide

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Introduction

Welcome to our comprehensive guide on TM44 inspections, the cornerstone of air conditioning system efficiency in the UK. This guide is designed to navigate you through the intricacies of TM44 audits, ensuring compliance with the Energy Performance of Buildings Directive (EPBD).

Whether you are a building owner, or a manager this resource will provide you with the essential information needed to understand your obligations, the inspection process, and the benefits of adhering to TM44 standards.

Our guide delves into the purpose of a TM44 audit, which aims to enhance system efficiency, reduce energy consumption and lower operating costs, all while contributing to a reduction in your carbon emissions.

We will explore the legal requirements, the inspection criteria, and the potential penalties for non-compliance. Additionally, we will offer insights into how these inspections can serve as a valuable tool for gathering data on utility costs and identifying opportunities for improvement.

Stay informed and ensure your air conditioning systems are not only compliant but also operating at their best with our TM44 guide.

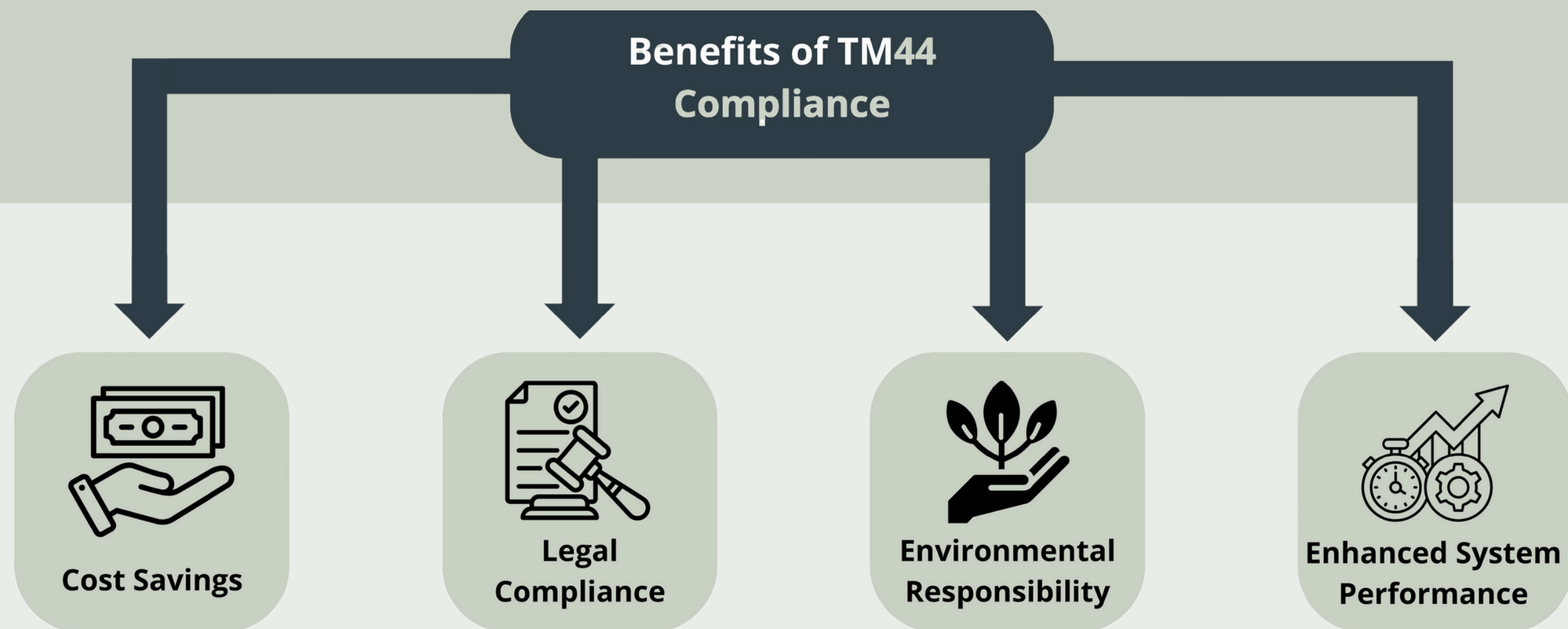
Why are air conditioning inspections a legal requirement?

An air conditioning system inspection and certificate is a legal requirement for organisations to have done by an independent, accredited assessor.

A TM44 inspection has several aims:

- To improve the efficiency of an air conditioning system
- Reduce the energy costs associated with operating the system
- Reduce energy consumption from using air conditioning
- Lower the carbon emissions that are associated with running an air conditioning system.

As part of the inspection and alongside your TM44 certificate, your assessor will provide you with a TM44 report, which will highlight how well the system is operating, advise on how the system can be improved, and suggest opportunities where you may need to replace older, less energy efficient systems or oversized systems, with newer, more efficient systems.



How often am I required to get a TM44 inspection?

You must get a TM44 inspection every five years. This will enable you to achieve better operational efficiency within your air conditioning system and will ensure you are legally complying with the EU Energy Performance of Buildings Directive (EPBD).

Is it a legal requirement for the recommendation report to be actioned?

There is no legal requirement for organisations to act on or implement any of the recommendations made in the report.

However, organisations that are looking to make their systems more energy efficient to support them on their journey to reducing their carbon emissions, may consider making changes to the way their systems run.



How do I know if my air conditioning unit needs an inspection?

Air conditioning systems with an effective rated output of more than 12kW are required to have a valid air conditioning inspection report and TM44 certificate in place.

This includes circumstances where individual units are less than 12kW, but the combined output across all units is 12kW or more. Additionally, the combined output would include multiple units within a building that is controlled by a single person, so is considered a single air conditioning system.

The effective rated output is the maximum calorific output in kW delivered during continuous operation as stated by the manufacturer. You can find this information on the rating plate attached to your system, in its operating manual, or on the manufacturer's website.

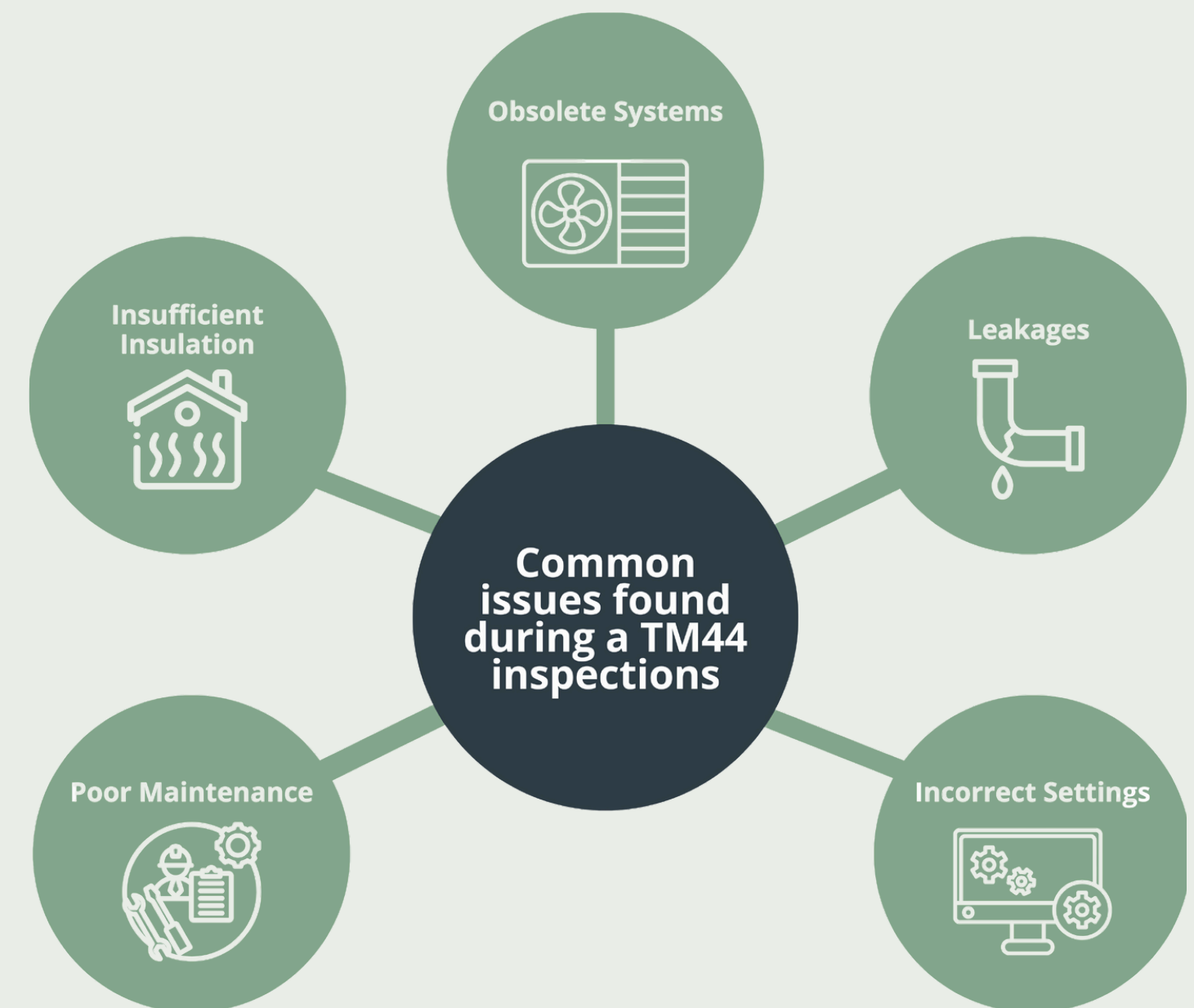


What advice will I receive from my TM44 report?

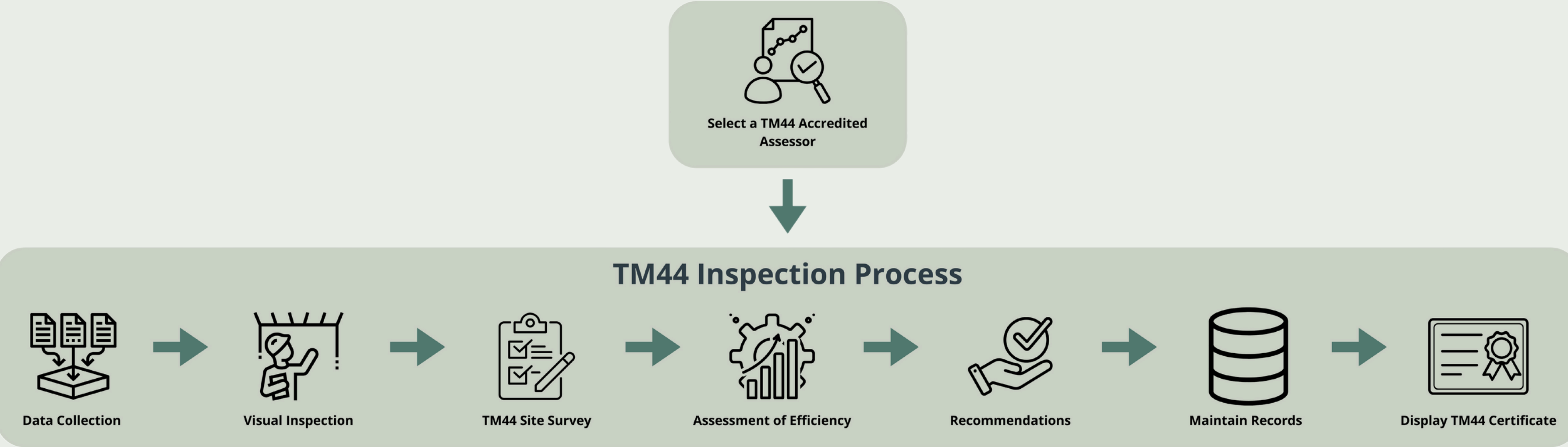
The air conditioning inspection report aims to support businesses in managing the energy efficiency of their air conditioning systems and identify opportunities to make energy and carbon savings.

The air conditioning inspection report will include:

- The effectiveness of the air conditioning system and any improvements that can be made to its efficiency
- Any faults discovered during the inspection
- The efficiency of the air conditioning controls, control systems and any improvement suggestions to these
- The effectiveness of equipment maintenance and ideas for improvement
- The current size of the installed system in relation to the cooling load
- Ways to optimise the air conditioning systems' performance under the usual operating conditions
- An overall summary of the key findings and recommendations for organisations to consider implementing to improve overall system performance



What are the key steps in TM44 inspections?



To stay fully compliant, the person who controls the operation of a qualifying air conditioning system must:

- Ensure TM44 inspections are done in accordance with the requirements and timetable of the regulations.
- Keep the most recent TM44 inspection report provided by an accredited energy assessor.
- Hand over any TM44 inspection reports to the new system operator should this change.

In cases where operational responsibilities are handed over and an inspection report is not passed on, the new operator must arrange for a TM44 Inspection within three months.

One or more air-conditioning units within a building controlled by a single person are considered to comprise a single air-conditioning system for the purposes of the regulations.

The person who controls the operation of the system is the person who controls the technical functioning of the system, not someone who can simply alter the temperature.

For the purpose of regulation, a building is defined as *'a roofed construction having walls, for which energy is used to condition the indoor climate, and a reference to a building includes a reference to a part of a building which has been designed or altered to be used separately.'*



How will the efficiency of my air conditioning system be assessed?

There are several different aspects of an air conditioning system that an energy assessor will review during a TM44 survey to understand its efficiency.

- **Refrigeration:** The inspection looks at the air conditioning units for indications of damage or lack of maintenance that would significantly impact its efficiency.
- **Air moving systems:** The impact of air moving in the system and how it is delivered can affect the overall efficiency of the air conditioning system.
- **Controls:** System controls are assessed in more detail. Better management of system controls can be one of the easier and lower cost solutions to improving efficiency. This could be as simple as adjusting time switches or for cooling or heating thermostats to be set correctly.
- **Maintenance and documentation:** The assessor will make a note of evidence of any planned maintenance scheduled. They will also assess the quality, extent and accessibility of information provided before an inspection, which will impact the effectiveness and cost of the air conditioning system audit.



How could these recommendations help reduce my energy and carbon consumption?

The recommendations made in the TM44 report will enable organisations to have more of an understanding of their systems and resolve any issues to ensure their air conditioning system is running efficiently.

The TM44 audit will also serve as a valuable tool to help you gather data on your utility and energy usage, which can be used to manage the overall running of the system and inform your carbon reduction strategy.

Understanding this data will enable you to make simple, low cost changes to the way your air conditioning systems are run. This could include regularly checking the controls to ensure the heating element is not fighting with the cooling, and ensuring the system is cleaned of dust to help it run efficiently.



What if I do not get a TM44 Certificate?

If you do not get your air conditioning inspected every five years, you will be fined a minimum of £300 which can be repeated weekly until you have a valid certificate in place. There will be a further £200 fine every time you fail to provide a copy of the report to an enforcement authority such as a Trading Standard Officer (TSO) within seven days.

Speak to one of our TM44 energy assessors

Call 01908 886906 and find out how our consultants can guarantee your TM44 compliance and ensure that your air conditioning system is working at its most efficient.

Who can provide a TM44 air conditioning inspection?

A TM44 air conditioning survey can only be carried out by an energy assessor who is a member of an accreditation scheme. Only air conditioning inspection reports that have been produced and logged on the register by accredited energy assessors are considered valid reports.

Remember to schedule regular TM44 inspections to maintain optimal performance and comply with legal requirements. Always consult with a qualified assessor for accurate guidance tailored to your air conditioning system.

What information is required to source a TM44 quote?

Asset List

Asset	Number of Split Units Outdoor	Number of VRF Units Outdoor	Number of Chiller Plants		Number of AHUs	Number of Packaged Rooftop Units	Number of Indoor Units	Location
		VRF - Variable refrigerant flow			AHU - Air handling unit			

What are the penalties for non-compliance?

There are penalties for non-compliance, with the fine for failing to arrange a TM44 inspection currently standing at £300. A further penalty of £200 can be issued if a Trading Standards Officer requests a copy of a TM44 report, and you fail to produce this within seven days.



Best practices for air conditioning management

- **Regular Maintenance:** Keep your air conditioning system well-maintained to ensure optimal performance.
- **Timely Inspections:** Schedule inspections well in advance of the due date to avoid last-minute issues.
- **Implement Recommendations:** Act on the recommendations provided in the TM44 report to improve efficiency.



Summary

Having your air-conditioning system inspected by an Energy Assessor is designed to improve efficiency and reduce the electricity consumption, operating costs and carbon emissions for your system. Energy inspections will highlight improvements to the operation of your existing systems or opportunities to replace older, less energy efficient or oversized systems with new, energy efficient systems.

TM44 air conditioning inspections are essential for ensuring the energy efficiency and environmental sustainability of your building's air conditioning systems. By understanding and complying with these requirements, you can achieve significant cost savings, enhance system performance, and contribute to a greener future.

Inspection, maintenance and cleaning programmes maintain the ability of the system to provide healthy and comfortable environments for building occupants, limiting the escape of refrigerant gases and ensuring the safety of equipment.

The practices and procedures needed to achieve these aims should be applied more frequently than the assessment for energy efficiency described in this TM44 inspection guide.

Why choose TEAM?

Our independent air conditioning service includes:

- ✓ Visual assessment of your air conditioning system
- ✓ Inspection of system components, controls and settings
- ✓ Summary of cost-effective improvements and recommendations
- ✓ The service is carried out by our accredited energy assessors in compliance with the UK Government regulations.

Get in touch to request a free quote from one of our TM44 assessors:



Call us on 01908 690 018



Email us at enquiries@teamenergy.com

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