

TM44 – Air Conditioning Inspection Requirements

What is a TM44 Air Conditioning Inspection?

- TM44 Air Conditioning Inspections are a mandatory requirement, designed to ensure that AC systems with a rated cooling capacity of 12kW or more perform efficiently.
- The mandatory requirement to carry out such inspections is contained within the revised Energy Performance of Buildings Directive (EPBD) which was progressively implemented across the UK from January 2013;
 - Energy Performance of Buildings (England & Wales) Regulations 2012
 - Energy Performance of Buildings (Scotland) Regulations 2008
- The TM44 Air Conditioning Inspections can assist in reducing the building's carbon footprint and thus, assist in achieving the UK Net Zero Strategy targets.



What does a TM44 Inspection Cover?



- All Air Conditioning systems with an output of more than 12kW require an inspection at intervals not exceeding five years. In Scotland, this can be as little as three years if systems are assessed as poorly maintained and inefficient. This also includes systems used for process applications such as server or comms room cooling.
- Where multiple smaller systems are installed and the combined capacity is greater than 12kW, and all such systems are under the control of one person, this would be classed as a single system, and would therefore require an inspection.
- Any mechanical ventilation such as an Air Handling Unit or Mechanical Ventilation Heat Recovery Unit, serving an air-conditioned space would also be inspected and assessed, with operating efficiency compared to commissioning records where available. This may assist in identifying any changes which have happened within the air delivery system since initial system start-up.
- Inspections must be carried out to CIBSE TM44, a detailed guide, which sets out the qualifications required by assessors and the process for carrying out the inspection under the EPBD.
- Inspectors are also required to identify and make recommendations to improve the efficiency of the plant.



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What does a TM44 Inspection Involve?

- The Inspection involves several stages:
 1. Pre-Inspection – collection of basic information such as equipment list, maintenance records, site drawings and system schematics.
 2. On-site system inspection – checking representative samples of installed equipment and identification of potential energy savings to be made.
 3. Evaluation of maintenance standards, with reference to good practice.
 4. Evaluation of controls and system set-up.
 5. Production of report for the responsible person including recommendations for improvement.



What are the Benefits of a TM44 Inspection?

- An inspection ensures legal compliance; failure to produce a report on request can result in fines of £300 per offence which can be repeated, potentially daily, at the discretion of local Trading Standards Offices (*Note – this is currently under review with the intention of increasing the penalty to £1,000*).
- If the recommendations are followed, system efficiency can be improved which can reduce energy use, carbon emissions and system running costs.
- Improved system performance leading to longer lifespan of equipment and optimum indoor environmental air quality conditions.

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How can ECG assist our Clients?

- All ECG TM44 Assessors are fully qualified and highly competent Refrigeration & Air Conditioning Engineers. In addition, each assessor has in excess of 20 years building services industry experience. All ECG TM44 Assessors have progressed through the APEL route, to become fully qualified to carry out Level 3 (simple system) and Level 4 (complex system) TM44 Air Conditioning Inspections and are fully accredited with Sterling Accreditation.
- ECG's TM44 Assessors carry out detailed and thorough TM44 Inspections, providing clients with factually accurate, clearly laid out TM44 reports.
- ECG's TM44 assessors have the capability to provide recommendations, including no-cost and low-cost measures, to improve system efficiency, operating performance and reduce running costs.