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**AIR
CONDITIONING**
INSPECTOR

Air Conditioning Inspections

Key dates for air conditioning Inspections

The Government has introduced regular air conditioning inspections. By 4 January 2009 all air conditioning systems over 250kW **must have had their first inspection done** (although many have yet to comply) and by 4 January 2011 all air conditioning systems over 12kW must have their first inspection. The reality is that there will not be enough Inspectors to do the work and the workload will spread over a longer period of time as the Industry gears up and companies are fined for non compliance.

The trigger for an air conditioning inspection is the size (effective rated output) of the system not the type of building and so the measures apply to homes, commercial and public buildings.

The inspection done by an accredited assessor will include an assessment of efficiency, a review of their sizing and advice on improvements or replacements and alternative solutions. The government has produced a DVD to help users understand air conditioning inspections and what they need to do. This is available on <http://www.communities.gov.uk/planningandbuilding/theenvironment/>

Many commercial buildings and an increasing number of homes have air conditioning systems. These systems should be carefully maintained and managed in order that they consume the minimum amount of energy possible.

Systems requiring an Air Conditioning Inspection.

Only air-conditioning systems with an effective rated output of more than 12kw are effected by the EPBD regulations, but that is very small, just a few air conditioning cassettes.

The "**effective rated output**" is the differentiator; it is the maximum calorific output in kW of the complete system as stated by the manufacturer deliverable whilst in continuous operation.

One or more parts of the system in a building must be added together, provided that the air conditioning system is controlled by a **single person**, this is the AC system which is considered to be a whole system by the EPBD regulations. The responsible person is the person who controls the AC system, which means the **technical functioning**, not the person who simply alters the temperature. This can lead to confusion; you can always give us a call for technical advice.

The type of building is also defined. This is the same definition as the EPC regulations , 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 seperately".

This is a complex subject as it can lead to **multiple AC reports in one building**, again **Monument** can advise.

An air-conditioning system refers to any AC system where refrigeration is used to provide cooling for the comfort of the occupants of the space.

Separate refrigeration which is not for the comfort of the occupants such as process applications, cold stores, beer cellars in pubs etc.



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Complying with Air Conditioning Inspection Regulations

Local Authorities (trading standards officers) are responsible for enforcing the requirements and they have the authority to issue penalty charge notices for non - compliance and continued non - compliance. Local Authorities get to keep the money so building owners beware!

As a general guideline buildings below 2000 m² are unlikely to need a certificate as their loading will probably be less than 250kW, but smaller buildings will fall into the category of having over 12kw of cooling.

Air Conditioning inspection Report requirements

What you need to know

If you control the technical operation of an air conditioning system, are a building manager or owner, you are responsible for obtaining an assessment report.

- With an effective rated output greater than 250kW, your system must be inspected immediately.
- With an effective rated output greater than 12Kw **must be inspected by** 4th January 2011
- **Must be inspected within five years** if the system was installed on or after 1 January 2008

The assessment must be carried out by an accredited Air Conditioning Energy Assessor. Accreditation ensures that the Assessors are professional, competent and adequately insured for the work.

What does the air conditioning inspection report cover?

You will receive a report from the assessment which includes recommendations for steps you could take to improve the efficiency of your system. These may range from improvements to the maintenance regime, through changes to the way the system is operated, to recommendations on the specification of a new or replacement system. The report will conform to a CLG approved scheme.

Implementing some or all of the recommendations should reduce your energy bills for air conditioning and could improve the energy ratings for the building, as calculated for an Energy Performance Certificate (EPC) or Display Energy Certificate (DEC).

Portfolio and building owners need to be aware that the lack of a certificate may lead to a fine and Solicitors **will start to ask for certification upon building transactions taking place**. Pre planning for this legislation and ensuring compliance is important NOW!

What is contained in the air conditioning inspection report?

The purpose of the AC Inspection and AC Report is to ensure that building owners and managers are given basic information regarding the efficiency of the air-conditioning systems they control, together with advice on how the energy efficiency of the system may be improved.



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The report will analyse your system based on a set of guidelines produced for CLG, and will cover in the reporting process such items as the potential reduced energy consumption due to the implementation of modifications, identification of inefficient plant, inappropriate user operation and major system and controls defects. Other items reviewed will be identification of opportunity to renew outdated equipment and control systems and cost effective alterations to the building fabric.

Acting on the advice in the AC Inspection report and rectifying faults or making appropriate improvements, where this is cost effective, should result in immediate improvements to the effectiveness of air - conditioning systems or reduce operating costs.

In some cases the costs of providing both heating and cooling may be reduced where the AC report identifies improvements on how the AC System is operated.

In many cases Monument Info Search will recognise that the AC system is being run well, all documents are in place and commissioned, with records available showing that the AC equipment has been regularly maintained to a good standard. In these cases the report will be brief with the main content advising on load reduction or on alternative solutions not previously considered. The AC Report will suggest relatively basic maintenance, such as cleaning and repairs, to AC equipment whose efficiency has suffered through neglect.

Cleaning operations or adjustments to controls do not form part of the AC Inspection procedure, although they will be advised upon. The Air conditioning Inspection is not intended, or expected, to involve any physical work as this could change the level of professional risk to the energy assessor. Should the building owner require any physical work to be undertaken, Monument Info Search can help you with this, by quotation and separate arrangement.

Most reports are likely to contain advice with a combination of simple low or no cost measures and recommendations which will carry an investment cost, or suggestions to investigate areas in more detail. Ongoing management of the systems, replacement units and maintenance advice is all available through Monument Info Search's technical specialists but will not be part of the initial Air Conditioning Report.

Local Authority trading standards officers have the power to check certification and issue fines for non compliance, currently £300.00-£5000.00 per building, with additional fines for continued non compliance.

Our team has worked alongside major names in the property, EPC and DEC industry for many years, you can be sure that you will be dealt with by highly experienced professionals. The whole of Europe is committed to the EPBD (Energy Performance of Buildings Directive), its not going to go away, and our advice is to pre plan your Air Conditioning Inspections to gain most from discounted Inspections, don't wait until the last minute!

Further reading:

[Improving the energy efficiency of our buildings: A guide to air-conditioning inspections for buildings](#)

[Air Conditioning FAQ's on CLG website](#)