

Overview

This standard covers the activities undertaken once the inspection is completed and involves the production and communication of a complete and comprehensive report on the energy performance of air conditioning systems. It is about collating all the information obtained on the air conditioning system and the generation of recommendations for measures to improve the energy performance of the system. It also covers issuing the energy performance report and responding to requests for clarification on aspects of the report. It involves ensuring adherence to the relevant industry requirements relating to reporting on the energy performance of air conditioning systems.

Performance criteria

You must be able to:

1. assemble and collate information from the onsite inspection of the energy performance of the air conditioning systems as part of the energy performance report
2. record the details of the location of the property and owner/manager
3. record the inspector's name, and date of inspection
4. record details of the systems inspected including a physical description and types of system
5. provide an inventory of equipment inspected including the manufacturer
6. record details of the results of the inspection within the energy performance report in accordance with the relevant data protection legislation
7. where relevant, provide information on alternative solutions for improving the efficiency of the air conditioning system and alternative cooling techniques
8. prepare and issue an energy performance report that meets the relevant industry codes of practice and standards
9. produce a summary of findings and recommendations within the energy performance report
10. provide additional advice on sources of guidance and publications on the ownership and operation of air conditioning systems serving the building
11. provide additional advice on sources of funding available to support further investigations and improvements in efficiency

Knowledge and understanding

You need to know and understand:

1. the industry format and content of a report on the energy performance of air conditioning systems in accordance with the relevant industry codes of practice and standards
2. how to record the details of the inspection, including recommendations to the property owner/manager
3. how your organisation must comply with the relevant data protection legislation
4. how to provide information on alternative solutions for improving the efficiency of the air conditioning system and alternative cooling techniques
5. the range of measures that improve the energy performance of air conditioning systems including the replacement of system or parts of the system and the rectification of faults
6. how to explain the recommendations included within the report and their implications to the property owner/manager
7. the sources of further information and advice to which reference could be made
8. how to provide additional advice on sources of guidance and publications on the ownership and operation of air conditioning systems serving the building
9. how to provide additional advice on sources of funding available to support further investigations and improvements in efficiency

Scope/range

Results of the inspection:

- the measurements and calculations reviewed or made for inspection
- the comments on likely efficiency of installations and suggestions to improve efficiency
- the comments on faults identified and suggested actions
- the adequacy of equipment maintenance and suggestions for improvement
- the adequacy of installed controls and control settings and suggestions for improvement
- the size of the installed system in relation to cooling load and suggestions for improvement

Alternative solutions:

- cooling load reduction
- fixed or movable solar shading
- control of illumination levels
- enhanced It management systems
- relocation of equipment
- control of ventilation of spaces including impact of open windows

Alternative cooling techniques:

- free cooling systems
- absorption cycle refrigeration systems
- equipment capable of operating in both cooling and heating modes

Report on the energy performance of air conditioning systems

Developed by	Instructus
Version Number	1
Date Approved	March 2019
Indicative Review Date	January 2024
Validity	Current
Status	Original
Originating Organisation	Instructus
Original URN	ASTACEA5
Relevant Occupations	Professional Occupations; Engineering; Engineering Professionals; Construction, planning and the built environment; Building and construction; Architects, Town Planners and Surveyors
Suite	Air Conditioning Energy Assessment
Keywords	inspection; production; communication; report; energy performance; air conditioning; systems; measures; recommendations; requirements
