
Overview

This standard is about undertaking non-domestic inspections to determine Operational Profiles to identify ways in which their energy efficiency can be improved by more effective energy management. It covers the assessment of current energy efficiency and the review of alternative ways of optimising energy efficiency and achieving carbon reduction. This assessment includes the review of buildings, activities, systems and people to recommend actions to improve energy efficiency and reduce carbon emissions. This standard covers both single buildings and a site where there are several buildings that interact with each other in terms of energy efficiency.

The non-domestic Operational Profile requires relevant data, over and above that collected in a property inspection – that is, information about the building occupier, their circumstances and how the building is operated. The purpose of the Operational Profile is to provide relevant advice to the customer appropriate to their use of the building, and to provide them with an accurate indication of the likely suitability of the Green Deal (or equivalent programme). The advice it supports will include energy efficiency measures to install in the building (which are the subject of INSGDA7), and how to operate the building and its systems in a more energy efficient manner.

It is intended to complement INSNDEA4, 5 and 6, which cover inspecting non-domestic properties (at the three conventionally defined Building Levels, 3, 4 & 5) to determine their energy performance and make recommendations for improvement. It therefore focuses on the additional activities that must be carried out when determining the Operational Profile. This activity should include the sourcing and application of any suitable specialist opinion that the assessor considers necessary.

You must understand and work to the requirements of each devolved nation.

Performance criteria

You must be able to: **Gather information relating to energy consumption in non-domestic buildings from occupiers to determine an Operational Profile**

1. prior to the inspection visit, notify the customer of the information required from them and agree with them how it will be obtained using relevant methods
2. confirm the customer is the person responsible as detailed under the relevant energy saving improvements programme
3. describe the range of data and information required from customers to enable an analysis of non-domestic energy consumption for the relevant energy saving improvements programme
4. establish the relevance of the methodology and software for the type of building
5. gather the required data and information from relevant sources
6. gather the required additional data to complete gaps or address inconsistencies
7. undertake a visual inspection of relevant aspects of the property above the requirements to produce an Operational Profile
8. use relevant data and expertise to make judgements about how the current condition of the property may affect its energy performance

Identify actions that could help reduce energy consumption in non-domestic buildings

1. establish and clarify the customer's requirements regarding energy consumption and carbon reduction
2. compare data with operational performance and establish differences, identifying reasons for any differences
3. establish future changes to energy consumption, and their implications
4. review current activities, systems, processes and behaviours that effect energy efficiency and carbon emissions, providing the customer with an explanation of how these affect energy consumption and fuel bills
5. identify changes that could be made to existing procedures, within the scope of the relevant energy saving improvements programme advice provision

6. identify financial incentives and schemes to support energy efficiency and carbon reduction relevant to actions being considered
7. identify the relevant legal requirements and their impact on energy use and carbon emissions
8. maintain impartiality when identifying effective actions to reduce operational energy consumption and achieve carbon reduction
9. refer the customer to relevant specialists(s) where required
10. advise the customer of the limitations on the advice given within a Green Deal (or equivalent programme) Advice Report
11. invite and respond to customer questions, issues and concerns about the assessment and the operational advice given

Maintain records of inspection findings

1. create and maintain records of your findings, including investigations undertaken, values recorded, and options considered, to the required level of detail
2. collate all relevant information to support the decisions made and advice given
3. where information cannot be obtained, or where data is recorded as 'unknown', detail where this applies and why this action was unavoidable
4. catalogue your records and store them securely in accordance with the relevant data protection legislation and ensuring that they can be accessed for future use

Knowledge and understanding

You need to know and understand: **Gather information relating to energy consumption in non-domestic buildings from occupiers and other sources to determine an Operational Profile**

1. the data and information that is required from the customer to enable an analysis of non-domestic energy consumption for the purposes of the relevant energy saving improvements programme
2. how to explain the information that is required to customers and agree with them how it will be obtained
3. the methods used to obtain data and information, such as questioning, telephone interview, customer completion questionnaires
4. how to undertake a visual inspection of any relevant aspects of the property required for an Operational Profile
5. the relevant devolved nation's requirements, definitions and conventions that apply to the prescribed methodology for the Operational Profile
6. how to identify and record gaps in information and gather additional data to fill them, including identifying where it would be necessary to request advice from a specialist
7. how to assess the current energy performance of the property elements that affect the energy performance of property, compared to its performance as originally built

Identify actions that could help reduce energy consumption in non-domestic buildings

1. the importance of establishing and clarifying the customer's requirements regarding reducing energy consumption
2. the types of necessary further investigations where data inconsistencies are discovered
3. the alternative methods for optimising the use of existing plant, equipment and consumables and how to explain and record them
4. how the occupier's current activities, systems and processes affect their energy consumption and fuel bills
5. the main methods and products used for controlling, managing and minimising water usage and how customers can access further information on them and their suppliers

6. the main methods and products used for controlling and managing waste including reduction, reuse and recycling methods and how customers can access further information on them
7. the sources of financial support for energy and carbon reduction
8. the limitations on the advice provided in the relevant programme Advice Report
9. the circumstances where it is necessary to refer the customer to appropriate specialists(s) for specialist assessment(s) of particular building fabric or building services
10. the type of questions, issues and concerns that customers might have about the assessment and the operational advice given; how to respond to those concerns
11. how to provide additional explanation and information as required, referring the customer to other sources as required

Maintain records of inspection findings

1. the range of methods, formats and conventions for recording information and evidence on the relevant Operational Profile
2. the level of detail within the records required to produce a non-domestic relevant programme Advice Report and justify decisions on the values recorded and advice given
3. create and maintain records of your findings, including investigations undertaken, values recorded and options considered, to the required level of detail
4. collate all relevant information to support the decisions made and advice given
5. where information cannot be obtained, or where data is recorded as 'unknown', detail where this applies and why this action was unavoidable
6. catalogue your records and store them securely in accordance with the relevant data protection legislation and ensuring that they can be accessed for future use

Scope/range

Gather information relating to energy consumption in non-domestic buildings from occupiers and other sources to determine an Operational Profile

Information needed:

- in accordance with the prescribed methodology for the Operational Profile

Methods:

- face to face questioning
- telephone interview
- customer completion questionnaires

Person responsible:

- for the property's fuel bills
- has the authority to take action under the relevant programme based on the advice given, after receiving any necessary consents from the property owner

Appropriateness of the methodology and software:

- Simplified Building Energy Model (SBEM) or
- Dynamic Simulation Model (DSM)

Sources:

- energy monitoring equipment
- utility bills etc. including Operational Rating Data, if available

Methodical, visual inspection:

- in accordance with the requirements of the prescribed methodology for the Operational Profile

Identify actions that could help reduce energy consumption in non-domestic buildings

Anticipated future changes to energy consumption:

- based on meter readings, hours run, name plate data, compiled utility bills and planned operational changes

Changes:

- that would improve the energy performance of the building
- meet legal, safety and operational requirements

Maintain records of inspection findings

Relevant information:

- legible visit notes relating to the Operational Profile
- clear site sketches (plan, elevation) to give an adequate record of the Operational Profile for audit purposes
- clear photographs containing mandated data (e.g. time and date) appropriately staged and annotated where necessary
- legibly completed questionnaires or records of conversations
- records of web searches or other research
- records of fuel bills seen and meter readings taken
- any other information you consider necessary to support your decisions
- any other information required by relevant energy saving improvements requirements

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| Developed by | Instructus |
| Version Number | 1 |
| Date Approved | March 2019 |
| Indicative Review Date | January 2024 |
| Validity | Current |
| Status | Original |
| Originating Organisation | Instructus |
| Original URN | ASTDGA5 |
| Relevant Occupations | Professional Occupations; Construction, planning and the built environment; Building and construction; Architects; Town Planners and Surveyors |
| Suite | Energy Assessment & Advice; Green Deal Energy Advice |
| Keywords | occupational profile; simplified building energy model; SBEM; dynamic simulation model; DSM; operational rating; energy performance certificate; EPC; green deal (or equivalent programme) advice report |
