



**Level 3 Diploma in**

## **Operational Ratings**

### Qualification Specification

Qualification Recognition Number: 600/7763/3

ABBE Qualification Code: DipORL313

**April 2019**

## **Why this document is being revised**

This document has been revised by ABBE in April 2019. A summary of the changes made to this document is, as follows:

- New address added to 1.4

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# 1. ABBE

## 1.1 Introduction

ABBE, the Awarding Body for Building Education is a forward thinking organisation that offers a range of apprenticeships, qualifications, benefits and support.

ABBE is regulated by Ofqual for the delivery of a range of qualifications. Our qualifications are nationally recognised helping learners to achieve their full potential and ambitions.

The full range of qualifications can be found on our website.

## 1.2 Mission Statement

**Our Values - Quality through Standards:** Our aim is to provide a high quality experience by building a strong community of mutual support and trust. We can use our collective talents to build meaningful partnerships to help us all to achieve our goals. ABBE is a recognised Awarding Organisation with strong professional integrity.

**Our Vision:** Is that every learner is confident, successful and has the opportunity to achieve their full potential.

**Our Mission:** ABBE Educates, inspires and empowers learners

## 1.3 Qualification Specification

This is the ABBE Qualification Specification for the ABBE Level 3 Diploma in Operational Ratings. The aim of this specification is to provide learners and centres with information about the content of this qualification.

This specification is a live document and, as such, will be updated when required.

Additional qualification details are available for ABBE approved centres in the ABBE qualification handbook.

## 1.4 Enquiries

Any enquiries relating to this qualification should be addressed to:

ABBE  
Birmingham City University  
University House  
15 Bartholomew Row  
Birmingham  
B5 5JU

Telephone: 0121 331 5174  
Email: [abbeenquiries@bcu.ac.uk](mailto:abbeenquiries@bcu.ac.uk)  
Website: [www.abbeqa.co.uk](http://www.abbeqa.co.uk)



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## 2. Qualification Information

### 2.1 Qualification Purpose

The need for the ABBE Level 3 Diploma in Operational Ratings has been brought about by the Government's 2008 enactment of Articles 7 and 10 of the Energy Performance of Buildings Directive. Legislation defines the type of public buildings that are required to produce a Display Energy Certificate (DEC).

DEC energy ratings are based on metered/recorded annual energy consumption and must be accompanied by an Advisory report on first issue. The DEC must be renewed annually, whilst the Advisory Report is to be renewed after 7 years.

DECs are produced by qualified and accredited Operational Ratings Assessors who hold a licence to practice, a status that will be achieved through achievement of the ABBE Level 3 Diploma in Operational Ratings (QCF) and membership of an appropriate accreditation scheme.

The qualification confirms occupational competence.

### 2.2 Who could take this Qualification?

This qualification is a professional qualification for those who wish to pursue a career as an Operational Ratings Assessor.

The qualification is suitable for new entrants to the sector seeking to begin a career in energy assessment but also for those with experience in property inspection or surveying wishing to gain a qualification in energy assessment.

### 2.3 Qualification Number

ABBE Level 3 Diploma in Operational Ratings: 600/7763/3

### 2.4 Qualification Level

This qualification has been listed on the Regulated Qualifications Framework (RQF) at: Level 3

### 2.5 Total Qualification Time

This qualification is allocated Total Qualification Time (TQT) this includes Guided Learning (GL) expressed in hours, which indicates the number of hours of supervised or directed study time and assessment. Credit has also be allocated to this qualification:

- The Total Qualification Time (TQT) for this qualification is: 380
- Guided Learning (GL) for this qualification is: 180
- Credit Value: 38 credits

### 2.6 Progression

This qualification has been designed to encourage participation in education and training in other related areas by establishing a framework of education and training for prospective Operational Ratings Assessors by:

- Encouraging those with expertise in other building services areas to qualify as an Operational Ratings Assessor.
- Providing opportunities for prospective Operational Ratings Assessors to achieve a nationally recognised Level 3 qualification;



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- defining the knowledge, understanding and skills learners need to undertake Operational Ratings assessments;
- Providing opportunities for learners to develop their Key Skills abilities: a range of skills and techniques, personal qualities and attitudes essential for successful performance in working life.

## 2.7 Age ranges

Pre 16	No
16-18	No
18+	Yes
19+	Yes

## 2.8 Structure of the Qualification

To achieve this qualification, learners must successfully complete the five mandatory units.

Mandatory Units			
URN	Unit Name	Credit Value	Level
H/503/8162	Conduct energy assessments in a safe, effective and professional manner	6	3
Y/503/8174	Prepare for energy assessments to produce Operational Ratings, Display Energy Certificates and Advisory Reports on non-dwellings	6	3
D/503/8175	Conduct inspection of buildings for energy assessment for Operational Ratings and associated Advisory Reports	10	4
H/503/8176	Determine Operational Ratings and issue Display Energy Certificates for non-dwellings	8	3
K/503/8177	Prepare and issue the Advisory Report	8	4

## 2.9 Barred Units

Units with the same title at different levels or units with the same content cannot be combined in the same qualification.

## 2.10 Language

ABBE qualifications and assessment materials will be provided through the medium of English.

## 2.11 Grading

This qualification is: Pass/Fail

## 2.12 Pre-course Procedures

This qualification is available to anyone who is capable of reaching the required standards. They have been developed free from any barriers that unfairly restrict access or progression thereby promoting equal opportunities.

There are no pre-entry requirements for this qualification.



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### **2.13 Qualification Review Boards**

Qualification Review Boards (QRBs) are set up for each qualification. The Boards are drawn from employers, centres, Higher Educational Institutes (HEIs) and others with a vested interest in the sector in which the qualification is used. The purpose of the QRB is to ensure that the content of the qualification and the proposed assessment methodology are fit for purpose and are appropriate to meet the requirements of the sector.

QRBs are ongoing and will be scheduled for specific points within the qualification lifetime; at the notional mid-point and again towards the review date of the qualification. During this process, the QRB will consider any feedback received on the performance of the qualification and will consider if the content, structure, purpose and assessment methodology remain appropriate to the needs of the sector. This will help to improve both our qualification and the specification.



### 3. Qualification Unit(s)

#### Unit 1: Conduct Energy Assessments in a Safe, Effective and Professional Manner

Unit Reference Number: H/503/8162

Level: 3

Credit: 6

#### Unit Summary

To develop knowledge, understanding and skills to contribute to the health, safety and security of the workplace, develop effective working relationships with others, and conduct energy assessments in a professional and ethical manner, complying with organisational and legal requirements at all times.

#### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand the Health and Safety requirements when undertaking energy assessments	1.1 Explain the relevant legal duties for health, safety and security in the workplace
	1.2 Identify the health, safety and security risks that could exist in different locations, and the action to take to minimise or mitigate risks
	1.3 Identify the risks to self which are associated with lone working
	1.4 Explain why it is important to remain alert to the presence of risks in the workplace
	1.5 Explain the importance of personal conduct in maintaining the health, safety and security of yourself or others
	1.6 Explain how to make use of relevant suppliers and manufacturers' instructions for the safe use of equipment, materials and products
	1.7 Explain who should be informed of any conflicts between different health, safety and security requirements
	1.8 Describe the procedures for different types of emergency
	1.9 Identify the types of suggestions for improving health, safety and security at work that could be made and who should be given them
	1.10 Identify the actions that may be taken to protect customers' property
2. Understand the legislation, codes of conduct and compliance requirements in relation to energy assessment	2.1 Explain why it is important to promote goodwill and trust when working with others and ways in which this can be achieved



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	2.2 Explain how to identify the information you require and the potential sources of such information
	2.3 Describe how to respond to enquiries from others and how to clarify their information needs
	2.4 Explain how to respond to enquiries which are outside your authority, beyond your area of knowledge or expertise or where the information requested is confidential
	2.5 Define the extent and limits for your own competence and expertise and the importance of not working beyond these limits
	2.6 Describe the ways in which disputes or differences of opinion should be handled and resolved to minimise offence and maintain respect
	2.7 Describe the formal complaints procedure that covers your work in terms of: <ul style="list-style-type: none"> <li>• any specific organisational requirements with regard to complaints</li> <li>• your own responsibility to deal with complaints and attempt to resolve them before escalating to the Accreditation Body, or the equivalent in the Devolved Administrations</li> </ul>
	2.8 Identify the range of potential conflicts of interest that you may encounter and the action required to manage these
	2.9 Explain why it is important to present a positive personal and professional image when dealing with people and how this can be achieved
	2.10 Describe the ways in which you may develop yourself within your role to cover your development needs
	2.11 Define the level of service expected by customers, their expectations as to the outcomes of the energy assessment or advice process and how to deliver an appropriate level of customer service
	2.12 Explain the need for prompt responses to enquiries
3. Understand the legislation, codes of conduct and compliance requirements in relation to energy assessment	3.1 Describe the relevant policies and legislation on combating climate change and the reduction of carbon emissions from buildings
	3.2 Describe the relevant legislation covering: <ul style="list-style-type: none"> <li>• The energy performance of buildings</li> <li>• Compliance with safe working practices</li> <li>• The relevant regulations in the Devolved Administrations</li> <li>• Where appropriate relevant legislation on the use of refrigerants</li> </ul>
	3.3 Describe the relevant official guidance and conventions relating to the assessment of energy performance
	3.4 Describe your specific responsibilities under prescribed codes of conduct and ethical standards



	3.5 Describe why it is important to comply with mandatory and advisory codes of practice
	3.6 Describe the specific auditing or monitoring requirements that relate to your registration with your accreditation organisation(s), or the equivalent in the Devolved Administrations and your responsibilities in complying with these
	3.7 Describe the framework under which Accreditation Bodies, or the equivalent in the Devolved Administrations, are required to operate, including their Scheme Operating Requirements or equivalent in the Devolved Administrations
	3.8 Explain the importance of obtaining and maintaining appropriate professional indemnity insurance (PII) cover, either through your own business or your employer and the extent and limitations of this type of cover
4. Be able to comply with organisational and legal requirements at all times	4.1 Carry out work in accordance with the relevant legal requirements, legislation and advisory and mandatory codes of practice
	4.2 Carry out work in accordance with the auditing and monitoring requirements of the relevant accreditation or certification organisation(s)
	4.3 Record customer contact information in accordance with organisational and legal requirements such as the Data Protection legislation
	4.4 Identify and maintain appropriate evidence to record to support your decisions and assumptions made when carrying out energy assessments
	4.5 Identify the evidence requirements defined in Scheme Operating Requirements, or their equivalent in the Devolved Administrations
5. Be able to maintain health, safety and security at work	5.1 Take action to mitigate health, safety and security risks
	5.2 Ensure personal conduct does not endanger the health, safety and security of self and other people
	5.3 Take action to ensure the protection of client's property and buildings
	5.4 Adhere to workplace policies and suppliers' or manufacturers' instructions for the safe use of equipment, personal protective equipment (PPE), materials and products
	5.5 Identify procedures for different types of emergency and implement them
	5.6 Make recommendations for improving health, safety and security in the workplace to the relevant person(s)
6. Be able to develop and maintain effective working relationships with colleagues, professionals, clients and others	6.1 Develop and maintain productive working relationships with others
	6.2 Request information from colleagues, professionals, clients and others in a polite, clear and professional manner



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	6.3 Identify and make use of further sources of information/help
	6.4 Deal with enquiries from colleagues, professionals, clients and others and seek clarification where necessary
	6.5 Handle enquiries which: <ul style="list-style-type: none"> <li>• Are outside own authority</li> <li>• Are beyond own area of knowledge or expertise</li> <li>• Involve confidential information</li> </ul>
	6.6 Handle and resolve disputes and/or differences of opinion
	6.7 Adhere to the formal complaints procedure when dealing with a complaint
7. Be able to conduct energy assessments in a professional manner	7.1 Deal with colleagues, professionals, clients and others in a tactful, courteous and equitable manner
	7.2 Carry out work in accordance with prescribed codes of conduct, ethical standards and recognised good practice
	7.3 Record all evidence supporting the assumptions and decisions made during the assessment
	7.4 Demonstrate effective management of work activities and personal and professional development
	7.5 Respond appropriately to pressure from any person(s) which may affect own judgment
	7.6 Demonstrate delivery of the appropriate level of customer service
	7.7 Assess customer expectations as to the outcomes of the energy assessment or advice process



## Unit 2: Prepare for Energy Assessments to Produce Operational Ratings, Display Energy Certificates and Advisory Reports on Non-dwellings

Unit Reference Number: Y/503/8174

Level: 3

Credit: 6

### Unit Summary

This unit enables the candidate to develop the knowledge and skills to understand the regulatory and organisational requirements for Display Energy Certificates and Advisory Reports, to agree and confirm the instructions to provide Display Energy Certificates and Advisory Reports and to prepare for a site visit to undertake a specific energy assessment.

### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand the regulations relating to the requirement for Display Energy Certificates and Advisory Reports	1.1 Explain the Energy Performance of Buildings Regulations which requires Display Energy Certificates and Advisory Reports and its relationship to the Energy Performance of Buildings Directive
	1.2 Explain the definition of a building for the purposes of the regulations
	1.3 Explain which buildings are required to have Display Energy Certificates and Advisory Reports under the regulations
	1.4 Explain the limited circumstances when a site visit inspection might not be required
	1.5 Summarise the format, content, frequency and validity of Display Energy Certificates and Advisory Reports
	1.6 Explain what data and other information is required in order to produce a Display Energy Certificate and Advisory Report
	1.7 Describe the approved software tools for the preparation of Operational Ratings, Display Energy Certificates and Advisory Reports and the principles of their operation
	1.8 Explain the requirements for the accreditation and qualification of energy assessors
	1.9 Explain the function and operation of the national register of Display Energy Certificates and Advisory Report
2. Understand how to agree and confirm instructions to undertake energy assessments	2.1 Explain how to clarify and confirm the requirements and expectations of the client(s) and the scope of your instructions so that all the information is available and defaults are not used except where justified
	2.2 Describe how to identify and explain to clients any circumstances that prevent you from undertaking an energy assessment



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	2.3 Identify the limitations and constraints that apply to the conduct of energy assessments
	2.4 Explain the importance of explaining and confirming in writing the arrangements agreed between you and client(s)
	2.5 Explain the importance of explaining the terms and conditions and fee structures and payment arrangements for energy assessments
	2.6 Identify the limitations and constraints of the planned energy assessment
	2.7 Explain how to confirm on-site inspection arrangements with the client(s) or other occupier
	2.8 Explain how to prepare a preliminary Health and Safety Risk Assessment
	2.9 Explain how to identify key cost drivers for the assessment
	2.10 Explain how to develop a fee proposal based on those cost drivers
3. Understand how to agree and confirm instructions to undertake energy assessments	3.1 Explain how to clarify and confirm the requirements and expectations of the client(s) and the scope of your instructions so that all the information is available and defaults are not used except where justified
	3.2 Identify the sources of information, including previous certificates or reports, needed for the preparation of Display Energy Certificates and Advisory Reports
	3.3 Explain how to explain these information sources to clients and confirm the information that they will provide prior to and during the site inspection
	3.4 Describe how to identify and explain to clients any circumstances that prevent you from undertaking an energy assessment
	3.5 State the limitations and constraints that apply to the conduct of energy assessments
	3.6 Explain the importance of explaining and confirming in writing the arrangements agreed between you and client(s)
	3.7 Explain the importance of explaining the terms and conditions and fee structures and payment arrangements for energy assessments
	3.8 Explain how to confirm on-site inspection arrangements, including contact details, with the client(s) or other occupier
	3.9 Identify the circumstances that may prevent you from undertaking an energy assessment and the importance of explaining the reasons to clients politely and clearly
	3.10 Explain the importance of confirming whether any specific on-site arrangements apply to the energy assessment
	3.11 Identify the legislation governing energy assessment and the overall purposes of the Energy Certificate
	3.12 Explain the role of the Energy Certificate in wider government policy including the Green Deal



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4. Be able to make the necessary preparations for an on-site inspection	4.1 Specify the tasks to be carried out prior to undertaking an energy assessment of a particular building
	4.2 Identify all available sources of existing information to determine the physical and environmental factors that could affect the conduct of the assessment
	4.3 Explain to the client the importance of obtaining existing information to determine the physical and environmental factors that could affect the conduct of the assessment
	4.4 Obtain from the client all available information that could affect the conduct of the assessment
	4.5 Evaluate all the available information in order to identify inconsistencies and any significant factors that may influence the conduct of the energy assessment
	4.6 Prepare a preliminary Health and Safety Risk Assessment
	4.7 Identify the key cost drivers for the assessment
	4.8 Develop a fee proposal for an energy assessment of a particular building based on the cost requirements of the client
5. Be able to agree and confirm instructions to undertake energy assessments	5.1 Respond promptly to requests from clients to undertake Energy Assessments
	5.2 Determine and explain whether the building requires a Display Energy Certificate, Advisory Report, both or neither
	5.3 Clarify and confirm the client's requirements and expectations and the scope of the instructions to the assessor to ensure that all the information is available and defaults are not used except where justified
	5.4 Confirm with the client in writing the agreed terms and conditions, fee structure and payment arrangements of the contract, including the need to take photographs and record other evidence for audit purposes
	5.5 Explain to the client sources of information for the preparation of a Display Energy Certificate or Advisory Report or both, including previous certificates or reports
	5.6 Confirm with the client the information which is required prior to and during the site inspection to prepare an accurate Display Energy Certificate or Advisory Report or both
	5.7 Confirm with the client the specific on-site arrangements and access requirements for conducting the site inspection, including client contact details on site and for the contract as a whole
	5.8 Explain any limitations or constraints which may apply to the energy assessment
	5.9 Explain the requirements of relevant Regulations and the overall purpose of the Energy Certificate, to the client and provide advice to the client on that legislation
	5.10 Identify and explain any circumstances which prevent the energy assessment from being undertaken
	5.11 Select the software tool for energy assessment, ensuring that the most up-to-date version of the approved software and associated reference materials can be accessed



	5.12 Explain the role of the Energy Certificate in wider government policy including the Green Deal
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### Unit 3: Conduct Inspection of Buildings for Energy Assessment for Operational Ratings and Associated Advisory Reports

Unit Reference Number: D/503/8175

Level: 4

Credit: 10

#### Unit Summary

This unit enables the candidate to develop the skills to conduct the inspection of buildings for energy assessment purposes including the safe use of equipment and the analysis of the building's construction, systems and controls and operational performance.

#### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand the equipment, resources and techniques needed to undertake building inspections	1.1 Identify the equipment and resources needed to undertake the inspection
	1.2 Explain the detailed inspection requirements that apply to a specific building as described in the relevant guidance documents and conventions
	1.3 Identify the different sources of information that may be used, including existing drawings, calculations and energy assessment reports from previous inspections
	1.4 Explain how to recognise different types of building construction, materials, services and fuel supplies from drawings as well as building structures
	1.5 Explain how to undertake a risk assessment
	1.6 State the requirements of the Royal Institute of Chartered Surveyors (RICS) Code of Measuring Practice
	1.7 Explain how to use test and measuring equipment accurately and safely
	1.8 Identify the level of detail within your records required to produce a complete and comprehensive Display Energy Certificate and justify your decisions on the values recorded and energy efficiency measures selected
	1.9 Explain the importance of making and maintaining records that are complete, accurate and legible
	1.10 Explain the reasons why it is necessary and important to record where and why accurate inspection has not been possible
	1.11 State the limited circumstances when a Display Energy Certificate may be produced without undertaking a site visit to the building it covers



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	1.12 Explain the circumstances in which records can include the fact that information is 'unknown' and the evidence required to support this choice
	1.13 Identify the relevant information that must be included in records, including: <ul style="list-style-type: none"> <li>• Legible site notes</li> <li>• Clear site sketches (plan, elevation) to give an adequate record of the inspection for audit purposes</li> <li>• Clear photographs containing mandated data (e.g. time and date) appropriately staged and annotated where necessary</li> <li>• Legibly completed survey forms</li> <li>• records of web searches or other research</li> <li>• Any other information you consider necessary to support your decisions</li> <li>• Any other information required by the OR methodology, OR conventions and the Scheme Operating Requirements</li> </ul>
	1.14 Explain the importance of storing records securely allowing for future access and the purposes for which your records may be used
2. Understand how to identify, record and analyse building environmental information, building construction information and building services and controls information	2.1 Identify the types of information sources relating to environmental factors
	2.2 Explain how to analyse environmental features that could impact building energy performance
	2.3 Explain how to identify environmental factors that could be used to benefit the building's energy performance by the use of Low and Zero Carbon (LZC) technologies
	2.4 Identify information sources that would assist in identifying and characterising the age, geometry, fabric and materials, building elements, construction techniques and building services
	2.5 Explain the principles of building structure, elements, materials and services and how to recognise these from drawings, specifications and any on-site inspection and test results
	2.6 Describe the problems that can affect the energy performance of the building fabric
	2.7 Explain the implications of hazardous building fabric for the energy assessment and reporting
	2.8 Describe any special inspection considerations
	2.9 Explain how to identify possibilities for improving the air-tightness and/or ventilation of buildings
	2.10 Identify the types of information sources that would assist in identifying and characterising the building services and controls and the type and state of maintenance
	2.11 Explain the principles of building services and controls and how to recognise these from drawings, specifications and any on-site inspection, commissioning records and test results and building logbooks



	2.12 Explain the principles of building services maintenance strategies and defect repair
	2.13 Explain how to recognise inadequate maintenance or neglect which may have implications for energy efficiency or health and safety
	2.14 Describe any special inspection considerations that apply to particular forms of building
	2.15 Explain how to carry out a methodical, visual, non-invasive, on-site inspection of the fixed building services and controls to establish or confirm their existence, location, power consumption, capacity, state of operation and maintenance
	2.16 Explain how to identify any bivalent system of heating or cooling such as radiators and heat pump, comfort cooling and natural ventilation
	2.17 Explain how to carry out a methodical, visual, non-invasive, on-site inspection of the building to establish all other sources of energy consumption such as industrial processes, lifts, elevators, PCs and printers, vending machines and other non-legislated energy demands
	2.18 Explain how installed building services and controls interact with building fabric
3. Explain how to identify, record and analyse energy supplies and metering information	3.1 Identify the types of information sources relating to energy supplies and metering
	3.2 Describe the types of fuels and energy sources and their units and conversion factors, which are likely to be encountered during a building inspection
	3.3 Describe any special inspection considerations that apply to particular forms of building
	3.4 State the requirements of industry best practice guidance on energy sources and metering
	3.5 Describe how to carry out a methodical, visual, non-invasive, on-site inspection of the building's energy sources to establish or confirm their type, location, storage and energy capacity, distribution systems, installed safety and protection systems, state of operation and maintenance
	3.6 Describe how to identify different types of metering and energy recording systems including systems for sub-metering
4. Understand how to identify, record and analyse systems of building occupation, management, maintenance and operation	4.1 Identify the types of information sources relating to how the building is occupied, managed, maintained and operated
	4.2 Describe any special inspection considerations that apply to particular forms of building
	4.3 State the requirements of industry best practice guidance on the occupation, management and maintenance of buildings
	4.4 Describe how to carry out a methodical, visual, non-invasive, on-site inspection of the building's energy uses to determine how the building is occupied, managed, maintained and operated in practice



5. Understand how to identify opportunities for installation of Low and Zero Carbon (LZC) technologies	5.1 Describe the recognised Low and Zero Carbon (LZC) technologies that can be used to improve the energy efficiency of non-dwellings and their characteristics, including their location and site requirements, installation requirements, efficiencies and other technical data relating to their energy performance
	5.2 Explain the appropriate circumstances in which it is reasonable to install LZC technologies
	5.3 Describe the energy benefits to buildings of installing LZC technologies
	5.4 Identify the appropriate circumstances in which LZC technologies may reasonably be installed
	5.5 Explain how to assess location and site for suitability for LZC technologies
	5.6 Explain the impact of the buildings listed for conservation status on the preparation of advisory reports
6. Be able to safely use the equipment, resources and techniques needed to undertake building inspections	6.1 Identify equipment and resources
	6.2 Use different sources of information (including existing drawings, calculations and energy assessment reports) from previous inspections
	6.3 Identify, from drawings and observation of building structures and other sources, the various types of building construction, materials, fuel supplies and services
	6.4 Undertake and record a risk assessment based on the hazards observed around and in the building taking mitigating actions as necessary to ensure the safety of the inspector and that of others in and around the building
	6.5 Use test and measuring equipment safely and in line with manufacturers' instructions
	6.6 Make accurate observations and measurements to provide sufficient data for the energy assessment of the building, including determining the floor area, using the RICS Code of Measuring Practice, amended where appropriate by Scheme Operating Requirements
	6.7 Obtain all additional information that is needed about the property and ensure that defaults are not used except where justified
	6.8 Make further investigations where observations are inconsistent with existing evidence and expected findings, record and, if appropriate, address such inconsistencies
	6.9 Identify circumstances when at the property that prevent you continuing with the inspection and explain the reasons to the client(s)
	6.10 Produce, maintain and retain accurate and legible records of your findings, which are clear, complete and conform to accepted professional and statutory requirements



	6.11 Ensure your records include: <ul style="list-style-type: none"> <li>• Investigations carried out</li> <li>• Values recorded</li> <li>• Options considered</li> </ul>
	6.12 Keep detailed records to enable you to produce a complete and comprehensive Display Energy Certificate and Advisory Report and justify your decisions on values recorded and energy efficiency measures considered
	6.13 Collate relevant information as evidence to support the specific decisions made on values chosen and energy efficiency measures considered, including the assumptions made during the inspection
7. Be able to identify, record and analyse building environmental information	7.1 Use all available sources of existing information to identify the environmental factors that could affect building energy performance
	7.2 Analyse those environmental features that could impact on the energy performance of the building including its geographical location and exposure
	7.3 Analyse those environmental features that may affect the energy performance of the property including building orientation and thermal mass, solar heating effects, and shading
	7.4 Identify and record environmental factors that could be used to benefit the energy performance of the building through the installation of LZC technologies, including orientation, roof design, shading and location
8. Be able to identify, record and analyse building construction information	8.1 Use all available sources of existing information to identify and characterise the age, geometry, fabric and materials, building elements, construction techniques and building services used in the building
	8.2 Explain the principles of building structure, elements, materials and services and how to recognise these from drawings, specifications and any on-site inspection and test results
	8.3 Identify from on-site observation whether the air tightness and ventilation of the building is amenable to cost-effective improvement
	8.4 Record all information collected during the inspection as evidence to support future assumptions, decisions and recommendations
9. Be able to identify, record and analyse building services and controls information	9.1 Use all available sources of existing information to identify and characterise the building services and controls used in the building and the type and state of maintenance
	9.2 Explain to the client instances of inadequate maintenance or neglect which may have energy efficiency or health and safety implications



	9.3 Carry out a methodical, visual, non-invasive, on-site inspection of the fixed building services and controls in order to establish or confirm their existence, location, power consumption, capacity, state of operation and maintenance
	9.4 Identify and record the existence of any bivalent systems of heating or cooling
	9.5 Carry out a methodical, visual, non-invasive, on-site inspection of the building to establish all other sources of energy consumption such as industrial processes, lifts, elevators, PCs and printers, vending machines, and other non-legislated energy demands
	9.6 Analyse the interaction of the installed building services and controls with the building fabric to establish a holistic view of the energy performance of the building
	9.7 Clearly record all information collected during the inspection as evidence to support all assumptions, decisions and recommendations
10. Be able to Identify, record and analyse energy supplies and metering information	10.1 Use all available sources of existing information to identify and locate the energy sources used in the building and the energy metering/measuring devices used
	10.2 Describe any special inspection considerations that apply to particular forms of building
	10.3 Compare all aspects of the building's energy sources and metering with the requirements of industry best practice guidance
	10.4 Carry out a methodical, visual, non-invasive, on-site inspection of the buildings energy sources in order to establish or confirm their type, location, storage and energy capacity, distribution systems, installed safety and protections systems, state of operation and maintenance
	10.5 Identify how energy consumption is recorded or metered and determine whether any sub-metering is installed
	10.6 Clearly record all information collected during the inspection as evidence to support all assumptions, decisions and recommendations
11. Be able to analyse systems of building occupation, management, maintenance and operation	11.1 Use all available sources of existing information to identify how the building is occupied, managed, maintained and operated
	11.2 Compare aspects of the building's occupation, management and operation with the requirements of relevant industry best practice guidance
	11.3 Carry out a methodical, visual, non-invasive, on-site inspection of the building's energy sources in order to determine how the building is occupied, managed, maintained and operated in practice



	<p>11.4 Where the inspection is carried out to provide a Display Energy Certificate for a subsequent year, observe that a Display Energy Certificate is displayed onsite and record its reference number to allow it to be verified on the Central register</p>
	<p>11.5 Clearly record all information collected during the inspection as evidence to support all assumptions, decisions and recommendations</p>
<p>12. Identify opportunities for installation of Low and Zero Carbon (LZC) technologies</p>	<p>12.1 Identify suitable locations for the installation of LZC technologies taking into account whether the building is listed or in a conservation area</p>



## Unit 4: Determine Operational Ratings and Issue Display Energy Certificates for Non-dwellings

Unit Reference Number: H/503/8176

Level: 3

Credit: 8

### Unit Summary

This unit enables the candidate to develop and demonstrate the skills to calculate Operational Ratings produce and issue Display Energy Certificates and communicate these to clients

### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand the equipment, resources and techniques needed to undertake building inspections	1.1 Identify the different categories of buildings as described in the relevant guidance and conventions
	1.2 Explain how to select the appropriate building benchmark
	1.3 Identify the different floor area measurement standards associated with the different benchmark categories
	1.4 Explain how to import and export data files between approved software and the national register
	1.5 Describe the prescribed tolerances and alignment for energy measurement periods
	1.6 Identify the units for energy consumption that are used in Operational Rating calculations
	1.7 Explain the prescribed weather corrections made within the calculation by approved software and the effect of these corrections on the Operational Rating
	1.8 Describe the allowable occupancy corrections
	1.9 Explain how to use approved software to make allowable occupancy corrections
	1.10 Explain how CO2 emissions are derived from energy consumption data
	1.11 Describe how to carry out a simple estimate of building air conditioning system output
	1.12 Explain why the Central Information Point must be regularly updated and how this is done
	1.14 Explain the action to take where 12 months energy data is not available or does not meet the requirements for measurement periods tolerance and alignment
	1.15 Identify relevant technical requirements, approved guidance and Conventions



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	1.16 Identify the approved software used to produce Display Energy Certificates
2. Understand how to identify, record and analyse building environmental information, building construction information and building services and controls information	2.1 Describe the prescribed format and contents of a Display Energy Certificate
	2.2 Explain how to obtain Asset Ratings and previous years' operational energy performance data from the national register
	2.3 Describe how to use approved software to generate the Display Energy Certificate
	2.4 Describe how to use approved software to generate the Technical Table
	2.5 Explain how to investigate significant changes between current data and previous Operational Ratings
	2.6 Explain the importance of checking the Display Energy Certificate to ensure it is complete and satisfies Energy Performance of Buildings Directive (EPBD) Regulations
3. Explain how to identify, record and analyse energy supplies and metering information	3.1 Use approved software to generate the data file for lodgement
	3.2 Explain the requirement for energy assessors to be accredited in order to produce valid Display Energy Certificates
	3.3 Explain the process by which an energy assessor's accreditation status is confirmed when producing a valid data file for lodgement
	3.4 Explain how to lodge Display Energy Certificates onto the National Register
	3.5 Explain how Display Energy Certificates may be retrieved from the National Register
4. Understand how to identify, record and analyse systems of building occupation, management, maintenance and operation	4.1 Explain the responsibility of clients under the EPBD Regulations for handling, exhibiting and updating Display Energy Certificates
	4.2 Identify the provisions of the EPBD regulations which specify the buildings requiring Display Energy Certificates
	4.3 Describe the initial transitional requirements for the implementation of the EPBD Regulations in regard to Operational Ratings and Display Energy Certificates, which no longer apply
	4.4 Explain the additional voluntary options for publicising the Operational Rating of a building
	4.5 Describe the current requirements for the implementation of the EPBD Regulations in regard to Operational Ratings and Display Energy Certificates
	4.6 State the restrictions on access to the Central Register
	4.7 Describe the enforcement procedures for non-conformity with EPBD Regulations in regard to Display Energy Certificates
	4.8 Explain the quality assurance process for the approval of Display Energy Certificates





	4.9 Explain how the Operational Rating is calculated and the importance of the various factors that contribute to it
	4.10 Explain how to present the Operational Rating to clients
	4.11 Explain the meaning of the information presented in the Display Energy Certificate
	4.12 Describe how to explain the meaning of the information presented in the Display Energy Certificate to clients and answer their questions on it
	4.13 Explain the meaning of the information presented in the Technical Table
	4.14 Describe how to explain the meaning of the information presented in the Technical Table to clients and answer their questions on it
5. Understand how to identify opportunities for installation of Low and Zero Carbon (LZC) technologies	5.1 Select the appropriate building benchmark(s) to use in the calculation of the Operational Rating
	5.2 Explain the different floor area measurement standards that are associated with different benchmark categories and select the appropriate one(s) to use for a given building
	5.3 Import and export data files using approved software using previous years' data files downloaded from the national register
	5.4 Choose an energy measurement period that is within prescribed tolerances and alignment
	5.5 Determine, from invoices and records, energy consumption figures, in appropriate units, for use in the calculation of the Operational Rating
	5.6 Apply occupancy corrections to benchmark data
	5.7 Carry out a simple estimate of building air conditioning system output
	5.8 Use approved software to calculate Operational Ratings
	5.9 Use approved systems to update the Central Information Point file in approved software
	5.10 Take appropriate action in cases where 12 month energy data is not available or where the requirements for measurement period tolerance and alignment cannot be met, in accordance with the methodology and/or conventions
6. Be able to safely use the equipment, resources and techniques needed to undertake building inspections	6.1 Obtain the previous years' Asset Rating and operational energy performance data from the national register
	6.2 Use approved software to generate the Display Energy Certificate and the Technical Table
	6.3 Investigate and explain any significant changes between current data and previous Operational Ratings
	6.4 Prepare Display Energy Certificates in line with approved methodology and Conventions
	6.5 Produce, maintain and retain internal records which are clear, complete and conform to accepted professional and statutory requirements



	6.6 Ensure that records include investigations carried out, values recorded and options considered, to the level of detail required to produce a complete and comprehensive Display Energy Certificate and justify decisions on values recorded
7. Be able to identify, record and analyse building environmental information	7.1 Use approved software to generate the data file for lodgement
	7.2 Lodge Display Energy Certificates onto the national register
	7.3 Retrieve Display Energy Certificates from the national register and present them to clients
8. Be able to identify, record and analyse building construction information	8.1 Advise clients on fulfilling their responsibilities under the EPBD Regulations for exhibiting and updating Display Energy Certificates, and the enforcement procedures for non-conformity
	8.2 Explain to clients the calculation of the Operational Rating and the importance of the various factors that go into its derivation
	8.3 Explain to clients the information presented in the Display Energy Certificate and answer questions related to this
	8.4 Explain to clients the information presented in the Technical Table and answer questions related to this



## Unit 5: Prepare and issue the Advisory Report

Unit Reference Number: K/503/8177

Level: 4

Credit: 8

### Unit Summary

This unit enables the candidate to develop and demonstrate the skills to produce and issue Advisory Reports and communicate these to clients

### Assessment Guidance

This unit can be assessed using the following method(s):

- Portfolio of evidence

<b>Learning Outcome The learner will:</b>	<b>Assessment Criterion The learner can:</b>
1. Understand the equipment, resources and techniques needed to undertake building inspections	1.1 Identify the features present in a building that are relevant to the development of recommendations for improving operational energy efficiency
	1.2 Identify operational and maintenance practices that are relevant to the development of recommendations for improving operational energy efficiency
	1.3 Identify the aspects of operational behaviour, energy awareness and training that are relevant to the development of recommendations for improving operational energy efficiency
	1.4 Explain the range of potential improvement measures associated with each building feature and how these may be ordered in terms of payback
	1.5 Explain how to review the potential energy efficiency measures associated with each building feature, in terms of their financial payback and carbon impact, to determine which are relevant
2. Understand how to identify, record and analyse building environmental information, building construction information and building services and controls information	2.1 Explain how to filter and prioritise a list of potential recommendations to produce a set tailored to the improvement of the operational energy efficiency of a building
	2.2 Describe how to assign carbon impact to selected recommendations for improving the operational energy efficiency of a building
	2.3 Describe how to review existing reports and energy surveys to identify additional recommendations that should be included in the report
	2.4 Identify the types of existing reports that could be reviewed to identify additional recommendations that should be included in the report
	2.5 Explain when to develop additional recommendations, and how to do this



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	2.6 Identify the approved guidance and conventions on gathering the information necessary to generate the recommendations
	2.7 State the reasons for making adjustments to recommendations
	2.8 Describe how to use approved software to generate the Advisory Report in accordance with approved guidance and conventions
3. Explain how to identify, record and analyse energy supplies and metering information	3.1 Describe how to use approved software to generate the data file for lodgement
	3.2 Explain the requirement for energy assessors to be accredited in order to produce valid Advisory Reports
	3.3 Describe the process by which an energy assessor's accreditation status is confirmed when producing a valid data file for lodgement
	3.4 Explain how to lodge Advisory Reports onto the national register
	3.5 Explain how to retrieve Advisory Reports from the national register
4. Understand how to identify, record and analyse systems of building occupation, management, maintenance and operation	4.1 Explain clients' responsibilities under the regulations for having and being able to produce a current Advisory Report
	4.2 Explain how the recommendations included in the Advisory Report are derived and the significance of their division into short, medium and long-term measures
	4.3 Describe how to explain the information presented in the Advisory Report to clients
	4.4 Explain how to respond to frequently asked questions from clients
	4.5 Describe the tax allowances and other incentives available for Low and Zero Carbon technologies
	4.6 Identify sources of further information available to clients that may aid their decision to implement any of the recommended measures
	4.7 Describe the level of detail within your records required to produce a complete and comprehensive Advisory Report and justify your decisions on the values recorded and recommendations made
	4.8 Explain the importance of making and maintaining records that are complete, accurate and legible
	4.9 Explain why it is important to store records securely allowing for future access and the purposes for which your records may be used
5. Understand how to identify opportunities for installation of Low and Zero Carbon (LZC) technologies	5.1 Identify the features present in a building that will be relevant to the development of recommendations for improving operational energy efficiency
	5.2 Determine operational and maintenance practices that will be relevant to the development of recommendations for improving operational energy efficiency



	5.3 Determine aspects of operational behaviour, energy awareness and training that will be relevant to the development of recommendations for improving operational energy efficiency
	5.4 Review the potential improvement measures associated with each building feature, in terms of their financial payback and carbon impact, to determine which are relevant
6. Be able to safely use the equipment, resources and techniques needed to undertake building inspections	6.1 Filter and prioritise a list of potential recommendations to produce a set tailored to the improvement of the operational energy efficiency of a building
	6.2 Assign carbon impact to selected recommendations for improving the operational energy efficiency of a building
	6.3 Review existing reports and energy surveys to identify additional recommendations that should be included in the report
	6.4 Develop additional recommendations where appropriate
	6.5 Comply with the approved guidance and conventions to gather the information necessary to generate the recommendations
	6.6 Provide clear reasons for any adjustments to recommendations
	6.7 Use approved software to generate the Advisory Report in accordance with approved guidance and conventions
7. Be able to identify, record and analyse building environmental information	7.1 Use approved software to generate the data file for lodgement
	7.2 Explain the requirement for energy assessors to be accredited in order to produce valid Advisory Reports
	7.3 Explain the process by which an energy assessor's accreditation status is confirmed when producing a valid data file for lodgement
	7.4 Lodge Advisory Reports onto the national register
	7.5 Retrieve Advisory Reports from the national register
8. Be able to identify, record and analyse building construction information	8.1 Explain to clients their responsibilities under the regulations for having and being able to produce a current Advisory Report
	8.2 Explain to clients how the recommendations included in the Advisory Report are derived, and the significance of their division into short, medium and long-term measures
	8.3 Explain the information presented in the Advisory Report and be able to answer questions related to this



	8.4 Explain to the client how they can obtain further information before deciding to implement any of the recommended measures
	8.5 Produce, maintain and retain internal records which are clear, complete and conform to accepted professional and statutory
	8.6 Ensure that records include investigations carried out, values recorded and options considered, to the level of detail required to produce a complete and comprehensive Advisory Report and justify decisions on values recorded and recommendations made





**Head Office Address:**

ABBE  
Birmingham City University  
University House  
15 Bartholomew Row  
Birmingham  
B5 5JU

**Contact:**

Telephone: 0121 331 5174  
Email: [abbeenquiries@bcu.ac.uk](mailto:abbeenquiries@bcu.ac.uk)  
Website: [www.abbequ.co.uk](http://www.abbequ.co.uk)



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