

Level 3 Certificate in Non-Domestic Energy Assessment (6361-02)

September 2017 Version 1.2



Qualification at a glance

Subject area	Energy Assessment
City & Guilds number	6361
Age group approved	18+
Entry requirements	Level 3
Assessment	Portfolio of evidence/Assignments
Fast track	Available
Support materials	Centre handbook Assignment guides Candidate logbook
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Title and level	GLH	TQT	City & Guilds number	Accreditation number
Level 3 Certificate in Non-Domestic Energy Assessment	30	300	6361-02	600/6590/4

Version and date	Change detail	Section
Version 1.1 June 2013	Amended approval to remove fast track approval paragraph	Approval Section 2
Version 1.2 September 2017	Added TQT details Deleted QCF	Qualification at a glance & Structure Throughout



Contents

1	Introduction	4
	Structure	5
2	Centre requirements	6
	Approval	6
	Resource requirements	6
	Candidate entry requirements	7
3	Delivering the qualification	9
	Initial assessment and induction	9
	Support materials	9
	Recording documents	9
4	Assessment	10
5	Units	11
Unit 331	Conduct energy assessments in a safe, effective and professional manner	12
Unit 335	Prepare for energy assessments of non-dwellings to fulfill regulatory requirements for Asset Ratings	17
Unit 336	Undertake energy assessments of existing Level 3 non-dwellings using the Simplified Building Energy Model SBEM	21
Unit 434	Report on the energy assessment of new and existing non-dwellings using Simplified Building Energy Model SBEM	27
Appendix 1	Relationships to other qualifications	32
Appendix 2	Sources of general information	33



1 Introduction

This document tells you what you need to do to deliver the qualification:

Area	Description
Who is the qualification for?	<p>City & Guilds qualifications in Non-Domestic Energy Assessment have been developed as professional qualifications for learners wishing to become an accredited Non- Domestic Energy Assessor (NDEA). The Energy Assessor qualifications have been developed in line with National Occupational Standards and in collaboration with Asset Skills. The qualifications support Government initiatives in providing a competent workforce to meet the requirements of the Energy Performance of Buildings Directive (EPBD). This European directive sets out the need for Energy Performance Certificates (EPC) and Non-Domestic Energy Performance Certificates (NDEPC). All homes bought, sold or rented require an EPC, which provides information on how to make domestic building more energy efficient and reduce carbon dioxide emissions. All non-domestic buildings on construction, sale and rent require a NDEPC. The NDEA deals with all commercial properties including residential properties converted to commercial use, using the Simplified Building Energy Model or equivalent approved software (such as Dynamic Simulation Modelling for very complex spaces).</p>
What does the qualification cover?	<p>The aim of this qualification is to meet the needs of candidates who work or want to work as a Non-Domestic Energy Assessor in the property sector and to allow candidates to learn, develop and practise the skills required for employment and/or career progression in the property sector.</p>
What opportunities for progression are there?	<p>It allows candidates to progress into employment or to the following City & Guilds qualifications:</p> <ul style="list-style-type: none">• Level 3/4 Air Conditioning Energy Assessment• Level 4 Diploma in Green Deal Non-Domestic Advice.

Structure

Please note these are the revised units based on updated NOS.

To achieve the Level 3 Certificate in Non-Domestic Energy Assessment, learners must achieve **30** credits from the mandatory units (331, 335, 336 and 434).

Level 3 Certificate in Non-Domestic Energy Assessment			
Unit accreditation number	City & Guilds unit number	Unit title	Credit value
Mandatory			
H/503/8162	331	Conduct energy assessments in a safe, effective and professional manner	6
J/503/8168	335	Prepare for energy assessments of non-dwellings to fulfill regulatory requirements for Asset Ratings	6
L/503/8169	336	Undertake energy assessments of existing Level 3 non-dwellings using the Simplified Building Energy Model SBEM	11
L/503/8172	434	Report on the energy assessment of new and existing non-dwellings using Simplified Building Energy Model SBEM	7

Total Qualification Time

Total Qualification Time (TQT) is the total amount of time, in hours, expected to be spent by a Learner to achieve a qualification. It includes both guided learning hours (which are listed separately) and hours spent in preparation, study and assessment.

Title and level	GLH	TQT
Level 3 Certificate in Non-Domestic Energy Assessment	30	300



2 Centre requirements

Approval

Centres not yet approved by City & Guilds to offer qualifications are required to complete both the Centre Approval Process and the Qualification Approval Process.

Please refer to our *Centre Manual - Supporting Customer Excellence* documents for further information, and for guidance on administration and quality assurance.

Resource requirements

Physical resources

Centres must provide access to sufficient equipment in the centre or workplace to ensure candidates have the opportunity to cover all of the practical activities.

Human resources

To meet the quality assurance criteria for this qualification, the centre must ensure that the following internal roles are undertaken:

- quality assurance co-ordinator
- assessor
- examinations secretary
- tutor
- invigilator.

Centre staffing

Staff delivering this qualification must be able to demonstrate that they meet the following occupational expertise requirements. They should:

- be occupationally competent or technically knowledgeable in the areas for which they are delivering training and/or have experience of providing training. This knowledge must be to the same level as the training being delivered
- have occupational expertise relevant to the inspection and reporting of residential property for energy assessment inspection purposes
- have a sound knowledge and understanding of the most recent version of RdSAP
- have recent relevant experience in the specific area they will be assessing
- have credible experience of providing training.

Centre staff may undertake more than one role, eg tutor and assessor or internal quality assurer, but cannot internally verify their own assessments.

Assessors and Internal Quality Assurer

Centre staff should hold, or be working towards, the relevant Assessor/Internal Quality Assurer TAQA qualification for their role in delivering, assessing and verifying this qualification, or meet the relevant experience requirements above.

Assessors should have appropriate occupational expertise relevant to property inspection and the production of EPCs. It is recommended that assessors:

- hold the Level 3 Certificate in Non-Domestic Energy Assessment, or an equivalent qualification, or APEL option as recognised by relevant industry Accrediting Body
- be able to demonstrate Continuing Professional Development in the area of Energy Assessment and Green Deal Advice and Assessment.

Continuing professional development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

Candidate entry requirements

Candidates should not be entered for a qualification of the same type, content and level as that of a qualification they already hold. There are no formal entry requirements for candidates undertaking the qualification. However, centres must ensure that candidates have the potential and opportunity to successfully gain the qualification.

Age restrictions

This qualification is not approved for use by candidates under the age of 18, and City & Guilds cannot accept any registrations for candidates in this age group.

Internal quality assurance

Approved centres must have effective quality assurance systems to ensure optimum delivery and assessment of qualifications.

Quality assurance includes initial centre approval, qualification approval and the centre's own internal procedures for monitoring quality. Centres are responsible for internal quality assurance, and City & Guilds is responsible for external quality assurance.

External quality assurance

External quality assurance for the qualification will be provided by City & Guilds external verification process.

Qualification Consultants are appointed by City & Guilds to approve centres, and to monitor the assessment and internal quality assurance carried out by centres. External verification is carried out to ensure that assessment is valid and reliable, and that there is good assessment practice in centres.

To carry out their quality assurance role, Qualification Consultants must have appropriate occupational and verifying knowledge and expertise. They must be familiar with the National Occupational Standards for Domestic Energy Assessors (Domestic). City & Guilds Qualification Consultants attend training and development designed to keep them up-

to-date, facilitate standardisation between verifiers and share good practice.



3 Delivering the qualification

Initial assessment and induction

An initial assessment of each candidate should be made before the start of their programme to identify:

- if the candidate has any specific training needs
- support and guidance they may need when working towards their qualification
- any units they have already completed, or credit they have accumulated which is relevant to the qualification
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the candidate fully understands the requirements of the qualification, their responsibilities as a candidate, and the responsibilities of the centre. This information can be recorded on a learning contract.

Support materials

The following resources are available for this qualification:

Description	How to access
Assignment guides for centres	www.cityandguilds.com
Candidate logbook	www.cityandguilds.com

Recording documents

Candidates and centres may decide to use a paper-based or electronic method of recording evidence.

City & Guilds endorses several ePortfolio systems, including our own, **Learning Assistant**, an easy-to-use and secure online tool to support and evidence learners' progress towards achieving qualifications. Further details are available at: www.cityandguilds.com/eportfolios.

City & Guilds has developed a set of *Recording forms* including examples of completed forms, for new and existing centres to use as appropriate. *Recording forms* are available on the City & Guilds website.

Although new centres are expected to use these forms, centres may devise or customise alternative forms, which must be approved for use by the external verifier, before they are used by candidates and assessors at the centre. Amendable (MS Word) versions of the forms are available on the City & Guilds website.



4 Assessment

Level 3 Certificate in Non-Domestic Energy Assessment

Unit Number	Unit Title	Assessment method	Where to obtain assessment materials
331	Conduct energy assessments in a safe, effective and professional manner (Level 3) (6)	Portfolio	The logbook for this unit is available from the City & Guilds website www.cityandguilds.com
335	Prepare for energy assessments of non-dwellings to fulfill regulatory requirements for Asset Ratings (Level 3) (6)	Assignment	The assignment is available on the City & Guilds website www.cityandguilds.com
336	Undertake energy assessments of existing Level 3 non-dwellings using the Simplified Building Energy Model SBEM (Level 3) (11)	Assignment	The assignment is available on the City & Guilds website www.cityandguilds.com
434	Report of the energy assessment of new and existing non-dwellings using simplified Building Energy Model SBEM (Level 4) (7)	Assignment	The assignment is available on the City & Guilds website www.cityandguilds.com



5 Units

Availability of units

The following units can also be obtained on The Register of Regulated Qualifications: <http://register.ofqual.gov.uk/Unit>

Structure of units

These units each have the following:

- City & Guilds reference number
- unit accreditation number
- title
- level
- credit value
- unit aim
- relationship to NOS, other qualifications and frameworks
- endorsement by a sector or other appropriate body
- information on assessment
- learning outcomes which are comprised of a number of assessment criteria.

Unit 331

Conduct energy assessments in a safe, effective and professional manner

UAN:	H/503/8162
Level:	Level 3
Credit value:	6
GLH:	30
Relationship to NOS:	This unit is based on the National Occupational Standards for Domestic Energy Assessors
Endorsement by a sector or regulatory body:	This unit is endorsed by Asset Skills, the Sector Skills Council for facilities management, housing, property, planning, cleaning and parking
Aim:	This unit aims to develop the skills needed to develop and maintain effective working relationships and conduct energy assessments in a professional and ethical manner. It also ensures that the energy assessor understands the thrust of Government Climate Change Strategy in general and the role of EPBD in particular.

Learning outcome
The learner will: 1. understand the health and safety requirements when undertaking energy assessments.
Assessment criteria
The learner can: 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

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|---|
| <p>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</p> <p>1.10 identify the actions that may be taken to protect customers' property.</p> |
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<p>Learning outcome</p>

<p>The learner will:</p>

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|--|
| <p>2. understand the legislation, codes of conduct and compliance requirements in relation to energy assessment.</p> |
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<p>Assessment criteria</p>

<p>The learner can:</p>

- | |
|--|
| <p>2.1 explain why it is important to promote goodwill and trust when working with others and ways in which this can be achieved</p> <p>2.2 explain how to identify the information you require and the potential sources of such information</p> <p>2.3 describe how to respond to enquiries from others and how to clarify their information needs</p> <p>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</p> <p>2.5 define the extent and limits for your own competence and expertise and the importance of not working beyond these limits</p> <p>2.6 describe the ways in which disputes or differences of opinion should be handled and resolved to minimise offence and maintain respect</p> <p>2.7 describe the formal complaints procedure that covers your work in terms of:</p> <ul style="list-style-type: none"> • any specific organisational requirements with regard to complaints • 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 <p>2.8 identify the range of potential conflicts of interest that you may encounter and the action required to manage these</p> <p>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</p> <p>2.10 describe the ways in which you may develop yourself within your role to cover your development needs</p> <p>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</p> <p>2.12 explain the need for prompt responses to enquiries.</p> |
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Learning outcome
The learner will: 3. understand the legislation, codes of conduct and compliance requirements in relation to energy assessment.
Assessment criteria
The learner can: 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"> • the energy performance of buildings • compliance with safe working practices • the relevant regulations in the Devolved Administrations • where appropriate relevant legislation on the use of refrigerants 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.

Learning outcome
The learner will: 4. be able to comply with organisational and legal requirements at all times.
Assessment criteria
The learner can: 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.

Learning outcome
The learner will: 5. be able to maintain health, safety and security at work.
Assessment criteria
The learner can: 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.

Learning outcome
The learner will: 6. be able to develop and maintain effective working relationships with colleagues, professionals, clients and others.
Assessment criteria
The learner can: 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 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"> • are outside own authority • are beyond own area of knowledge or expertise • involve confidential information 6.6 handle and resolve disputes and/or differences of opinion 6.7 adhere to the formal complaints procedure when dealing with a complaint.

Learning outcome

The learner will:

7. be able to conduct energy assessments in a professional manner.

Assessment criteria

The learner can:

- 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 335

Prepare for energy assessments of non-dwellings to fulfill regulatory requirements for Asset Ratings

UAN:	J/503/8168
Level:	Level 3
Credit value:	6
GLH:	30
Relationship to NOS:	This unit is based on the National Occupational Standards for Domestic Energy Assessors
Endorsement by a sector or regulatory body:	This unit is endorsed by Asset Skills, the Sector Skills Council for facilities management, housing, property, planning, cleaning and parking
Aim:	This unit enables the candidate to develop the skills to agree and confirm instructions to undertake energy assessments of non-dwellings to fulfill regulatory requirements for Asset Ratings

Learning outcome
The learner will: 1. understand the regulations and requirements needed to undertake energy assessments.
Assessment criteria
The learner can: 1.1 explain the legislation governing energy assessment and the overall purposes of the Energy Performance Certificate 1.2 identify the relevant regulations for energy performance requirements new buildings 1.3 identify the relevant regulations for energy performance requirements for existing buildings 1.4 describe the types of property and situations that do not by law require energy certification and how to deal with voluntary certification 1.5 identify the Building Regulations, EPBD Regulations and other Regulations' energy performance requirements that are relevant to buildings other than dwellings

- 1.6 describe the different **stages** involved in the energy assessment of new buildings, ensuring compliance with relevant aspects of Building Regulations and leading to the production of the 'as built' assessment, for the purpose of producing an Energy Performance Certificate
- 1.7 review the frequency of energy assessments and the validity of certificates and reports
- 1.8 explain the role of the Energy Performance Certificate in wider government policy including where relevant the Green Deal.

Range

Stages: Design stage, SBEM data entry, compliance, production of EPC, advising clients.

Learning outcome

The learner will:

2. understand how to agree and confirm instructions to undertake energy assessments.

Assessment criteria

The learner can:

- 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
- 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 identify the **circumstances** that may prevent you from undertaking an energy assessment
- 2.9 explain the importance of explaining politely and clearly to clients the reasons why you cannot undertake an energy assessment
- 2.10 explain the importance of confirming whether any specific arrangements apply to the energy assessment
- 2.11 state which software tools have been approved for particular applications
- 2.12 explain the principles of operation of the approved software tools.

Range

Client: internal; external.

Circumstances: properties beyond the learners level of competences; own diary pressures; difficulties in gaining access; conflicts of interest; lack of key information.

Learning outcome
The learner will: 3. understand how to investigate relevant matters relating to property and energy usage.
Assessment criteria
The learner can: 3.1 identify the different types of preparatory information that it is important to obtain to ensure a complete and accurate assessment and certificate 3.2 identify the different sources of preparatory information (including existing calculations and energy audit reports) relating to the energy performance of the property 3.3 explain how to obtain preparatory information relating to the energy performance of the property 3.4 identify prevailing geographical/environmental features that may affect the energy performance of the property 3.5 explain how to evaluate relevant information in order to identify any significant factors that may influence the energy assessment, including: <ul style="list-style-type: none"> • gaps in information concerning the building and its energy use • health and safety considerations, accessibility • level of building complexity 3.6 explain how to identify circumstances that prevent you from assessing the energy performance of the property 3.7 explain the importance of explaining to clients why you may not be able to fulfill the agreed contract.

Range
Significant factors: gaps in information concerning the building and its energy use; health and safety considerations; accessibility.

Learning outcome
The learner will: 4. be able to agree and confirm instructions to undertake energy assessments.
Assessment criteria
The learner can: 4.1 determine the nature and characteristics of the property to ensure that it requires an Operational Rating (OR) or Asset Rating as appropriate 4.2 respond to requests to undertake energy assessments from clients 4.3 clarify and confirm the requirements and expectations of clients and the scope of own instructions to ensure that all the information is available and defaults are not used except where justified 4.4 explain to the client the relevant regulations that are legally required and the overall purpose of the Energy Certificate 4.5 explain to the client why the Energy Certificate has to conform to prescribed protocols and must be accompanied by cost-effective recommendations 4.6 explain to the client the limitations and constraints of the planned energy assessment, identifying any circumstances that prevent the assessment from being undertaken and giving your reasons

- 4.7 agree in writing with the client the terms, conditions and fee structure under which the energy assessment will be undertaken, including the need to take photographs and record other evidence for audit purposes
- 4.8 confirm to clients the terms, conditions and arrangements that have been agreed and confirm in writing any **specific arrangements** with clients or other occupiers
- 4.9 provide any necessary guidance to clients with regard to the legislation governing energy assessment
- 4.10 select a suitable software tool, appropriate to the building being assessed and approved under the Regulations for energy assessment.

Range
Specific arrangements: access to the property; those present at the property at the time of onsite inspection; health and safety issues.

Learning outcome
The learner will:
5. be able to investigate relevant matters relating to energy usage within a property.
Assessment criteria
The learner can:
5.1 investigate and record any preparatory information to ensure complete and comprehensive energy assessment and certification
5.2 identify prevailing geographical/environmental features that may affect the energy performance of the property
5.3 evaluate preparatory information to identify inconsistencies and any significant factors that may influence the energy assessment
5.4 explain to clients the scope of information that will assist the energy assessment and request any relevant additional information that will be relevant
5.5 inform clients promptly in cases where your investigations reveal problems that prevent you from assessing the energy performance of the property
5.6 ensure that the most up-to-date version of the approved software and associated reference materials can be accessed.

Unit 336

Undertake energy assessments of existing Level 3 non-dwellings using the Simplified Building Energy Model SBEM

UAN:	L/503/8169
Level:	Level 3
Credit value:	11
GLH:	45
Relationship to NOS:	This unit is based on the National Occupational Standards for Domestic Energy Assessors
Endorsement by a sector or regulatory body:	This unit is endorsed by Asset Skills, the Sector Skills Council for facilities management, housing, property, planning, cleaning and parking
Aim:	This unit will help to develop knowledge and skills needed to inspect non-dwellings to determine the energy performance of a level 3 property using the Simplified Building Energy Model, making recommendations for cost-effective improvements

Learning outcome
The learner will: 1. understand the equipment and resources needed to undertake energy inspections.
Assessment criteria
The learner can: 1.1 explain the principles of building structure elements, fabric, services and overall design philosophy as relevant to energy assessment 1.2 identify equipment and resources needed to undertake the inspection 1.3 explain the detailed inspection requirements that apply to a property as described in relevant guidance documents and Conventions 1.4 explain the definitions and conventions embodied within the approved software used to calculate energy performance ratings 1.5 identify, from drawings and building structures, the various types of building construction, materials and services 1.6 explain how to conduct the inspection in a thorough, methodical and consistent manner

1.7 identify the range of measures to improve the energy performance of a property that may be included within an Energy Performance Certificate Recommendations Report.

Range

Services: space heating systems, cooling systems, ventilation, lighting, water heating, fans, pumps.

Learning outcome

The learner will:

2. understand the implications of building characteristics affecting the energy performance of a property.

Assessment criteria

The learner can:

- 2.1 identify **assumptions** that are made in determining energy performance
- 2.2 state the factors that are relevant to determining the energy performance of a property and those that are deemed not to affect the energy performance of the property
- 2.3 identify and evaluate the relevance of building characteristics which affect the energy performance of a Level 3 building and make it distinct from Level 4
- 2.4 identify and classify variations in building use and activities, as defined in the Simplified Building Energy Model (SBEM) and its conventions, including the use of planning classifications
- 2.5 describe how much impact building characteristics have on the building's overall energy performance
- 2.6 identify critical property features and activities where incorrect choice of values will be significantly detrimental to accuracy, including:
 - allocation of the most appropriate activity to zones
 - lighting
 - choice of default HVAC in zones where none exists
 - selection of HVAC efficiency and its allocation to the appropriate zone
 - availability of daylight
 - presence of Low and Zero Carbon Technologies
- 2.7 identify the problems that can affect the energy performance of the building fabric and services
- 2.8 review the **implications** of hazardous building fabric for the energy assessment and reporting.

Range

Assumptions: building regulation date, wall constructions, floor constructions, glazing depths, system efficiencies.

Implications: accident, injury, damage, liability, loss.

Learning outcome
The learner will: 3. understand how to collate information from the on-site inspection and other sources to assess the energy performance of the property.
Assessment criteria
The learner can: 3.1 explain how to make accurate observations and take accurate measurements 3.2 explain how to make further investigations where observations are inconsistent with existing evidence and expected findings and how to identify the causes of these inconsistencies 3.3 explain how to collate information required to assess the energy performance of property.

Learning outcome
The learner will: 4. understand how to prepare and issue an Energy Performance Certificate which includes recommendations for cost-effective improvements and meets relevant regulations.
Assessment criteria
The learner can: 4.1 state the prescribed format and content of an Energy Performance Certificate 4.2 state the range of energy efficiency measures that may be included within an Energy Performance Certificate 4.3 identify the approved software used for the production and lodgement of completed Energy Performance Certificates 4.4 explain how to correctly use the approved software for the production and lodgement of completed Energy Performance Certificates 4.5 explain the principles underpinning the approved tools used to calculate the energy performance ratings 4.6 explain how to input data using the approved software in order to determine energy performance ratings 4.7 explain how to use approved software to generate energy efficiency measures for the property 4.8 explain the importance of checking that data has been inputted correctly prior to lodgement and how to review data if the calculation will not process or appears incorrect 4.9 explain the importance of checking the energy efficiency measures generated prior to lodgement, deleting any that are inappropriate and providing your reasons 4.10 explain the way in which energy efficiency measures are generated and circumstances when it is appropriate to delete them 4.11 explain the importance of checking the Energy Performance Certificate and energy efficiency measures for the property to ensure they comply with relevant requirements 4.12 state how to use the information technology underpinning the national register for lodgement and retrieval of Energy Performance Certificates 4.13 explain how to provide necessary audit evidence via electronic transfer.

Learning outcome
The learner will: 5. understand how to make and maintain complete, accurate and legible records of your work.
Assessment criteria
The learner can: 5.1 explain the level of detail within your records required to produce a complete and comprehensive Energy Performance Certificate 5.2 explain the level of detail within your records required to justify your decisions on the values recorded and energy efficiency measures included 5.3 state why it is important to make and maintain complete, accurate and legible records 5.4 explain the reasons why it is necessary and important to record where and why accurate inspection has not been possible 5.5 explain the circumstances in which records can include the fact that information is “unknown” and the evidence required to support the use of defaults in these circumstances 5.6 explain the importance of storing records securely allowing for future access and the purposes for which those records may be used.

Learning outcome
The learner will: 6. be able to inspect a Level 3 non-dwelling.
Assessment criteria
The learner can: 6.1 ensure that equipment and resources needed are available for the inspection of Level 3 non-dwellings 6.2 identify yourself to those present at the property before commencing inspection 6.3 identify and record the method of construction of the property and the main materials used, the installed building services and the activities which take place in the building 6.4 use surveying equipment correctly and record and interpret data accurately 6.5 identify circumstances when at the property that prevent you continuing with the inspection and explain the reasons to the client(s) 6.6 undertake a methodical visual inspection of the property in accordance with the requirements of the approved software and current Conventions 6.7 draw a suitable sketch plan and elevations where none exist.

Range
Data: dimensions, construction types, lamp data, building service system information, efficiencies, fan powers. Circumstances: the discovery of unexpected or hazard.

Learning outcome:

The learner will:

7. be able to collate information from the on-site inspection and other sources to assess the energy performance of the property.

Assessment criteria

The learner can:

- 7.1 make accurate observations and measurements which are necessary to provide data for the calculation of an energy performance rating and production of energy efficiency measures for the property
- 7.2 obtain all additional information that is needed about the property and ensure that defaults are not used except where justified
- 7.3 identify where observations are inconsistent with existing evidence and expected findings and conduct further investigations to establish the causes of these inconsistencies
- 7.4 identify critical property features and activities where incorrect choice of values will be significantly detrimental to accuracy and take appropriate steps to correctly represent these features to arrive at an accurate assessment of the property
- 7.5 follow the correct procedures for collecting information to enable the energy efficiency of the property to be determined.

Learning outcome

The learner will:

8. be able to prepare and issue an Energy Performance Certificate which includes recommendations for energy efficiency measures and meets relevant regulations.

Assessment criteria

The learner can:

- 8.1 describe the prescribed format and content of an Energy Performance Certificate
- 8.2 explain the way in which energy efficiency measures are generated and circumstances when it is appropriate to delete them
- 8.3 use approved software correctly to determine energy performance ratings and to generate energy efficiency measures for the property
- 8.4 check that data has been inputted correctly prior to lodgement and review data if calculations do not work or if the result appears incorrect
- 8.5 recognise a result that is unlikely to be correct for the property in question
- 8.6 check the Energy Performance Certificate and energy efficiency measures prior to lodgement, ensuring compliance with relevant requirements and make any necessary amendments
- 8.7 take the necessary corrective action where any of your checks indicate a possible incorrect data entry or error in the resulting rating or energy efficiency measures
- 8.8 use the information technology underpinning the national register for lodgement and retrieval of Energy Performance Certificates
- 8.9 lodge Energy Performance Certificates on the prescribed national databank on completion
- 8.10 provide necessary audit evidence via electronic transfer.

Learning outcome
The learner will: 9. be able to make and maintain complete, accurate and legible records of your work.
Assessment criteria
The learner can: 9.1 produce and maintain accurate and legible records of your findings, which are clear, complete and conform to accepted professional and statutory requirements, including investigations carried out, values recorded and options considered 9.2 keep detailed records which ensure that you can produce a complete and comprehensive Energy Performance Certificate and justify your decisions on values recorded and energy efficiency measures selected 9.3 collate information as evidence to support the specific decisions made on values chosen and energy efficiency measures considered, including: <ul style="list-style-type: none"> • legible site notes • clear site sketches (plan, elevation) to give an adequate record of the inspection for audit purposes • clear photographs containing mandated data appropriately staged and annotated where necessary • legibly completed survey forms records of web searches or other research • any other information you consider necessary to support your decisions • any other information required by Scheme Operating Requirements 9.4 explain the circumstances in which records can include the fact that information is “unknown” and the evidence required to support the use of defaults in these circumstances 9.5 store records securely allowing for future access and state the purposes for which your records may be used.

Unit 434

Report on the energy assessment of new and existing non-dwellings using Simplified Building Energy Model SBEM

UAN:	L/503/8172
Level:	Level 4
Credit value:	7
GLH:	35
Relationship to NOS:	This unit is based on the National Occupational Standards for Domestic Energy Assessors
Endorsement by a sector or regulatory body:	This unit is endorsed by Asset Skills, the Sector Skills Council for facilities management, housing, property, planning, cleaning and parking
Aim:	This unit aims to develop the knowledge and skills required to report on energy assessment of new and existing non-dwellings, using Simplified Building Energy Model

Learning outcome
The learner will: 1. understand how to produce Recommendations Reports for non-dwellings using SBEM.
Assessment criteria
The learner can: 1.1 describe the prescribed format and content of an Energy Performance Certificate Recommendations Report 1.2 identify the range of energy efficiency measures that may be included within an Energy Performance Certificate Recommendations Report 1.3 state the approved software used to generate energy efficiency measures for the property 1.4 explain the principles underpinning the approved software used to calculate energy ratings and produce Recommendations Reports 1.5 explain how to correctly use the approved software to produce Energy Performance Certificates 1.6 explain the importance of checking that data has been inputted correctly and how to review data if the calculation will not process or if the result appears incorrect 1.7 explain the effect of choosing default data options on the energy efficiency measures offered by SBEM

1.8	explain how to check the Energy Performance Certificate Recommendations Report for cost-effective improvement, ensuring compliance with relevant requirements and conventions
1.9	identify the level of detail within your records required to produce a complete and comprehensive Recommendations Report and justify your decisions on the values recorded and energy efficiency measures selected
1.10	explain the importance of making and maintaining records that are complete, accurate and legible
1.11	explain the reasons why it is necessary and important to record where and why accurate inspection has not been possible
1.12	identify the circumstances in which records can include the fact that information is “unknown” and the evidence required to support this choice
1.13	explain the importance of storing records securely allowing for future access and the purposes for which your records may be used.

Range
<p>Approved software: ISBEM, other software approved by the CLG for the production of EPCs and recommendation reports.</p> <p>Records: site notes, floor plans, photographs, evidence, building agent questionnaires, contracts, terms and conditions, building service information.</p>

Learning outcome
<p>The learner will:</p> <p>2. understand how to provide a clearly defined and robust hierarchy of energy efficiency measures for non-dwellings.</p>
Assessment criteria
<p>The learner can:</p> <p>2.1 explain how to use approved software to generate energy efficiency measures for the property</p> <p>2.2 explain the way in which energy efficiency measures are generated and circumstances when it is appropriate to delete them</p> <p>2.3 explain the importance of checking the energy efficiency measures generated, deleting any that are inappropriate, and providing your reasons</p> <p>2.4 identify the factors that could affect the choice of energy efficiency measures for improvements to the property, including:</p> <ul style="list-style-type: none"> • issues that make them unsuitable for the property • interactions between building fabric and building services • listed building status/conservation areas <p>2.5 identify the issues that could make energy efficiency measures unsuitable for the property, including:</p> <ul style="list-style-type: none"> • property situation eg subject to extreme weather • property condition eg state of repair of external walls • inadequate ventilation • traditional construction • any other features of the property, or its site/location, which might adversely affect the performance of the recommended improvement, or the building’s performance after improvement

2.6	explain how to make appropriate deletions/amendments based on the practical and economic feasibility for the building under consideration
2.7	identify current typical costs of energy efficiency measures
2.8	explain how to estimate typical costs, for the particular building, of any proposed energy efficiency measures
2.9	explain how to assess the carbon impact and payback period of energy efficiency measures in order to provide an hierarchy of improvement measures
2.10	identify the data and information required to be lodged on the relevant central register
2.11	identify appropriate advice on the implementation of the energy efficiency measures that may be given to the client.

Range
Approved software: ISBEM, other SBEM software approved by CLG.

Learning outcome
The learner will: 3. understand how to communicate the value of a Recommendations Report and how it can be used.
Assessment criteria
The learner can: 3.1 state the objective of producing Recommendations Reports 3.2 explain the difference between high, medium and low carbon impact energy efficiency measures and the scale of savings that each may achieve 3.3 identify which elements have greater impact on the energy performance of the building in question and why 3.4 explain how estimates of costs for energy efficiency measures have been arrived at and how robust they are 3.5 explain how to communicate and explain the energy efficiency measures to the client 3.6 explain the importance of retaining documentation for audit purposes or legal compliance 3.7 explain how to convey essential information in a written report in a way which will be comprehensible to the client 3.8 identify where to refer clients for further help and advice.

Range
Impact: high impact, medium impact, low impact. Communication: in person, telephone conversation, letter, e-mail, report. Documentation: site notes, floor plans, dated photographic evidence (including all elevations, HVAC, lighting, activities, construction, insulations, lamp, types and controls), evidence, building agent questionnaire, building services information, justification of assumptions, Ariel view, evidence of efficiencies, calculations.

Learning outcome
The learner will: 4. be able to produce Recommendations Reports for non-dwellings using SBEM.
Assessment criteria
The learner can: 4.1 use approved software to generate energy efficiency measures that improve energy performance 4.2 check the Recommendations Report, ensuring compliance with relevant requirements and current conventions 4.3 produce and maintain accurate and legible records which are clear, complete and conform to accepted professional and statutory requirements to include: <ul style="list-style-type: none"> • records investigations carried out • values recorded • options considered 4.4 record information at a sufficient level of detail to produce a complete and comprehensive Energy Performance Certificate and justify your decisions on values recorded and energy efficiency measures selected 4.5 describe the circumstances in which records can include the fact that information is "unknown" and the evidence required to support this choice 4.6 store records securely allowing for future access and explain the purposes for which the records may be used.

Range
Recommendations: high, medium and low CO2 impact and short, medium and long term payback.

Learning outcome
The learner will: 5. be able to provide a clearly defined and robust hierarchy of energy efficiency measures for non-dwellings.
Assessment criteria
The learner can: 5.1 use the approved software to generate energy efficiency measures to improve energy performance 5.2 explain the effect of choosing default data options on the energy efficiency measures offered by SBEM 5.3 check the energy efficiency measures generated and make appropriate deletions, additions and amendments based on the practical and economic feasibility for the building under consideration, providing and documenting your reasons 5.4 identify the factors that could affect the choice of energy efficiency measures for improvements to the property, including issues that make them unsuitable for the property, interactions between building fabric and building services and listed building status/conservation areas 5.5 identify the relative costs of any energy efficiency measures which may be proposed 5.6 provide a hierarchy of improvement measures based on carbon impact and payback period

5.7	identify the data and information required to be lodged on the relevant central register and show understanding of the lodging procedures
5.8	produce a valid Recommendations Report, in accordance with approved guidance
5.9	provide initial advice on the implementation of the recommendations made.

Range [include where required, otherwise delete]
Valid: lodged at the landmark registry, accurate, appropriate, compliant with conventions.

Learning outcome
The learner will: 6. be able to communicate the value of a Recommendations Report and how it can be used.
Assessment criteria
The learner can: 6.1 explain to clients the objective of producing Recommendations Reports 6.2 explain to clients the difference between high, medium and low carbon impact measures, giving examples of the scale of savings which may be achieved by each 6.3 explain to clients which recommendations have greater impact on the energy performance of the building in question and why 6.4 explain to clients how estimates of costs for energy efficiency measures have been arrived at and how robust they are 6.5 explain energy efficiency measures to the client 6.6 understand the importance of retaining documentation for audit purposes or legal compliance 6.7 highlight the essential information contained in the Recommendations Report in a way which will be comprehensible to the client.



Appendix 1 Relationships to other qualifications

Links to other qualifications

Centres are responsible for checking the different requirements of all qualifications they are delivering and ensuring that candidates meet requirements of all units/qualifications.

This qualification has connections to the:

- Level 4 Diploma in Green Deal Non-Domestic Advice (6066-04)
- Level 3 Certificate in Domestic Energy Assessment (6361-01).

Literacy, language, numeracy and ICT skills development

This qualification can develop skills that can be used in the following qualifications:

- Functional Skills (England) – see www.cityandguilds.com/functionalskills
- Essential Skills (Northern Ireland) – see www.cityandguilds.com/essentialskillsni
- Essential Skills Wales – see www.cityandguilds.com/esw



Appendix 2 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on **www.cityandguilds.com**.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- the centre and qualification approval process
- assessment, internal quality assurance and examination roles at the centre
- registration and certification of candidates
- non-compliance
- complaints and appeals
- equal opportunities
- data protection
- management systems
- maintaining records
- assessment
- internal quality assurance
- external quality assurance.

Our Quality Assurance Requirements encompasses all of the relevant requirements of key regulatory documents such as:

- SQA Awarding Body Criteria (2007)
- NVQ Code of Practice (2006)

and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

Access to Assessment & Qualifications provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information such on such things as:

- **Walled Garden:** how to register and certificate candidates on line
- **Events:** dates and information on the latest Centre events
- **Online assessment:** how to register for e-assessments.

Useful contacts

UK learners General qualification information	T: +44 (0)844 543 0033 E: learnersupport@cityandguilds.com
International learners General qualification information	T: +44 (0)844 543 0033 F: +44 (0)20 7294 2413 E: intcg@cityandguilds.com
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: centresupport@cityandguilds.com
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 F: +44 (0)20 7294 2404 (BB forms) E: singlesubjects@cityandguilds.com
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: intops@cityandguilds.com
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: walledgarden@cityandguilds.com
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	T: +44 (0)121 503 8993 E: business@cityandguilds.com
Publications Logbooks, Centre documents, Forms, Free literature	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413

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As the UK's leading vocational education organisation, City & Guilds is leading the talent revolution by inspiring people to unlock their potential and develop their skills. We offer over 500 qualifications across 28 industries through 8500 centres worldwide and award around two million certificates every year. City & Guilds is recognised and respected by employers across the world as a sign of quality and exceptional training.

City & Guilds Group

The City & Guilds Group operates from three major hubs: London (servicing Europe, the Caribbean and Americas), Johannesburg (servicing Africa), and Singapore (servicing Asia, Australia and New Zealand). The Group also includes the Institute of Leadership & Management (management and leadership qualifications), City & Guilds Licence to Practice (land-based qualifications), the Centre for Skills Development (CSD works to improve the policy and practice of vocational education and training worldwide) and Learning Assistant (an online e-portfolio).

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City & Guilds
1 Giltspur Street
London EC1A 9DD
T +44 (0)844 543 0000
F +44 (0)20 7294 2413
www.cityandguilds.com

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