

Level 3 Certificate in Installing, Testing and Ensuring Compliance of Electrical Installations in Dwellings (2397-30)

Candidate logbook



www.cityandguilds.com
October 2013
Version 1.0

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Qualification title	City & Guilds qualification number	Qualification Accreditation Number (QAN)
Level 3 Certificate in Installing, Testing and Ensuring Compliance of Electrical Installations in Dwellings	(2397-30)	600/7888/1

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1 About your Candidate Logbook

1.1 Contact details



Candidate name	
Candidate address	
Centre name	
Centre number	
Programme start date	
City & Guilds registration number	
Date of registration with City & Guilds	

This Candidate Logbook/Work-Based Evidence Record is your personal achievement in practical work carried out mostly in the workplace and knowledge assessments achieved. It may not be possible to replace this document; therefore it should be kept in good condition and in a safe place to be used by you to record your progress.

Once completed, you must keep this portfolio for a period of three years. During this time your training centre can request that you submit your portfolio to them. This will be returned to you.

Keep a record of relevant contact details in the space provided below. You may find it helpful to make a note of phone numbers and email addresses here.

Your Assessor(s)	
Internal Quality Assurer (IQA)	
Quality Consultant (QC)	

1.2 Introduction to the logbook

This logbook will help you complete the units in **Level 3 Certificate in Installing, Testing and Ensuring Compliance of Electrical Installations in Dwellings (2397-30)**. It contains forms you can use to record your evidence of what you have done.

This Logbook contains the **8 mandatory units** necessary for achievement of this qualification.

About City & Guilds

City & Guilds is your awarding body for this qualification. City & Guilds is the UK's leading awarding body for vocational qualifications.

Information about City & Guilds and our qualifications is available on our website **www.cityandguilds.com**.

2 About your approved centre

Types of approved centres

Assessment for your qualification will be carried out at your centre. Your centre may be your place of work, a college, training provider or a combination of these.

City & Guilds approves centres to offer their qualifications and regularly monitors them to make sure they meet our quality standards and follow our assessment policies.

Centre responsibilities

Your centre is responsible for the administration of your qualification. Centre staff will:

- register you with City & Guilds
- give you your City & Guilds enrolment number
- apply for your certificate(s) when you have completed your qualification or units.

Centres are also responsible for supporting you as you work towards your NVQ. Centres will:

- carry out an initial assessment with you
- tell you about any learning or training (and resources) you will need to help you complete your qualification
- provide an induction programme to explain how the assessment process works
- produce an assessment plan for you.

Assessment roles

The following people at your centre will help you achieve your qualification.

The Assessor

The assessor is the person you will have the most contact with as you work towards your qualification. Your assessor will:

- help you identify any training you need
- agree an assessment plan with you
- help you plan and organise your workload and evidence
- observe you carrying out your job in the workplace over a period of time
- ask you questions about the work you do
- make decisions about your evidence
- judge when you are competent and meet the national standards
- give you feedback about your evidence and competence.

You may have more than one assessor depending on which units of the qualification you take.

The Internal Quality Assurer (IQA)

The Internal Quality Assurer (IQA) maintains the quality of assessment within the centre.

The mentor

A mentor is someone in your workplace who can help and support you as you are working towards your qualification but does not carry out assessments. They may be able to provide you with witness testimony for your qualification.

Witness

Witnesses do not judge your overall competence but may provide you with statements about your performance which can be used as evidence of your work.

3 About candidates

Candidate role and responsibilities

Your responsibilities as a City & Guilds candidate are to:

- provide your centre with your personal details so you can be registered with City & Guilds
- participate in an initial assessment and induction
- agree a personal assessment plan with your assessor
- collect and organise your evidence as agreed in your assessment plan
- attend regular meetings with your assessor to discuss your progress and to amend your plan when required
- meet with other centres and City & Guilds staff to talk about your qualification and evidence
- make sure you understand and comply with health and safety law and regulations.

Your centre **may** ask you to agree and sign a learning contract with them to show how you will be assessed for your qualification.

Learner registration number

Make sure you keep a note of your unique City & Guilds registration number on the front page of this logbook.

Moving to a new centre

If you change jobs or move to a new centre before you complete your qualification, you may be able to complete it at a new centre. Ask your centre to apply for any certificates of unit credit for you before you leave, and add them to your records.

A new centre will need your candidate enrolment number, your assessment records and evidence to help you complete your qualification.

4 Qualification assessment

4.1 Before you start your qualification

The **Level 3 Certificate in Installing, Testing and Ensuring Compliance of Electrical Installations in Dwellings (2397-30)** is a qualification that enables suitable experienced electrical operatives to be able to meet the Electrical Assessment Scheme requirements to enable them to apply to join a Part P registration scheme.

Initial assessment

Before you start work on your qualification you will meet with your assessor to discuss what you need to do to complete your qualification. This can include:

- checking you are taking the right qualification level
- identifying any training or learning you will need to help you gain your qualification
- agreeing an assessment plan
- signing a learning contract.

Skill scan

As part of this meeting, you will discuss the skills and knowledge you may already have, and decide how this can be used towards your qualification. This process is sometimes called a skill scan. There is a Skill Scan Form in this logbook you can use to record the skills you may already have.

4.2 Recognition of prior experience

It is a condition of this qualification that persons wishing to register must be able to prove they have at least two years previous practical experience.

The table below lists a range of evidence that can be provided to confirm the candidate meets the required experience.

For candidates employed by an electrical contractor:

- 1 Can the candidate supply invoices covering the previous two years confirming they have completed a suitable range of work in dwellings?

Invoices for:

- a. a full rewire
- b. work in special locations
 - garages
 - gardens.

-
- 2 Can the candidate provide copies of a full range of wiring certificates?

- Electrical Installation.
- Minor Electrical Installation Works Certificate.
- Electrical Installation Condition Report.

-
- 3 Estimates and quotes for work in dwellings, including:

- a full rewire
- a periodic test of a dwelling
- evidence from customers.

-
- 4 Evidence of advertising:

- internet
- local paper
- directories.

For self-employed candidates

Evidence from employers:

- timesheets
 - testimonials
 - payslips.
-
-

5 Evidence of sub-contracting:

- HMRC documents
- variation orders
- payslips.

6 Works diary or PC print-outs such as Outlook.

5 Using the logbook

- 1) There are eight units which require practical assessments covering what you must be able to do.
- 2) Each unit is further divided into Learning Outcomes (LO) and Assessment Criteria (AC). An assessment criterion details a specific task or competence you will need to confirm you have mastered.
- 3) Units also contain a range statement, this is a list of the specific equipment, materials and tasks that are required for the particular unit.

Completing the units

It is not necessary or even advisable to provide a written log for each assessment criterion.

The most widely used methods of presenting your evidence are:

Observation (O)	Direct observation by your assessor
Witness Testimony (WT)	Witness testimony from your employer or a client
Product (P)	Signed and dated photographic evidence and job-related documents eg method statements, risk assessments, instruction manuals, electrical certificates etc.
Questioning (Q)	Questioning by your assessor to confirm points that are not covered by other methods
Professional Discussion (PD)	A pre-planned discussion with a set agenda – will enable you to explain and explore the issues particular to your organisation and thereby demonstrate understanding.

Beside each assessment criterion is a box in which you record how you have met the requirements of that particular assessment criterion; this might be a written description or a reference to where you have stored a photo or site document.

When you need to store extra evidence such as photos, certificates or instruction manuals they should be placed at the back of the portfolio in unit and AC order.

It is good practice to label each individual piece of documentary evidence with the Units and AC number it covers.

The candidate then lists the type and location in the evidence box.

Video clips and voice recordings recorded on smartphone are also effective evidencing methods; these can be presented on a USB stick or CD.

Assessment Plan

At the beginning of each unit is an assessment plan; this needs to be completed by the assessor in a 1:1 meeting with the candidate.

The assessment plan is provided so that the candidate always knows which units they should be working on and what is expected of them.

The assessment plan can be copied and needs to be completed prior to each assessment; this would typically be before:

- a site visit,
- a logbook review with the assessor.

Range Requirements

Range requirements are simply a list of equipment, materials and tasks that must be included in the work you are to be assessed on.

The range is designed to cover the specific competences required by each unit. Whilst all the range requirements need to be covered, the ranges have been selected to be readily available to operatives conducting electrical work in dwellings.

5.1 Recording forms

This logbook contains all of the forms you and your assessor will need to plan, review and organise your evidence. Your assessor will be able to help you decide which forms you need to complete and help you fill them in.

Candidate progress record

Form used to record the units/qualification(s) being assessed and details and signatures of assessor(s) and internal quality assurer(s).

Skill scan/Initial assessment

This can be used to record the skills and knowledge you may already have. This may be part of your initial assessment.

Tracking document

You can use this form to log your achievement of the units for the whole qualification including completion of assignments and online assessment

On site assessment plan/feedback

You and your assessor will use this form to plan each assessment session. Your assessor will use this form to give feedback on the task. It will also enable you and your assessor to plan what actions need to be done before the next session.

On site observation report

Your assessor will complete during observation. You will both sign this as a true record.

Supplementary evidence sheet

To be completed by you, your workplace recorder or another witness to evidence meeting assessment criteria that could not be signed off during direct observation with your assessor.

Oral questioning supplementary evidence sheet

Your assessor will use this form to log any additional questions and answers asked during observation or to mop up any missing evidence.

Photographic supplementary evidence sheet

Use this form to include a photo and brief description of the task being carried out.

Signature sheet

This is used to record the details of staff that will provide you with witness testimony.

Units

These record where the evidence you produce meets the requirements of the unit. You should give each piece of evidence an evidence reference number.

Please photocopy these forms as many times as required to log the evidence.

5.2 Units

To achieve the **Level 3 Certificate in Installing, Testing and Ensuring Compliance of Electrical Installations in Dwellings (2397-30) 600/7888/1**, learners must achieve **27** credits from the mandatory units below.

UAN	City & Guilds unit number	Unit title	Credit
Mandatory			
H/504/4494	301/501	Understand and apply health and safety legislation, practices and procedures 'electrical installation in dwellings'	4
D/504/4493	302/502	Understand and apply environmental legislation, working practices and the principles of environmental technology systems associated with electrical installations in dwellings	4
K/504/4898	303/503	Understand and apply the practices and procedures for overseeing and organising the work environment when installing electrical installations in dwellings	3
R/504/4491	304	Electrotechnical occupational competence - approval of electrical installations in dwellings	1
T/504/5469	305/505	Understanding and applying the principles, practices and procedures for the planning, preparation and selection of wiring systems and electrotechnical equipment in dwellings	3
M/504/5471	306/506	Understand and apply the principles, practices and legislation for diagnosing and correcting electrical faults in electrical installations in dwellings	4
T/504/5472	307/507	Understand and apply the practices and procedures for the installation and connection of wiring systems and electrotechnical equipment in dwellings	3
A/504/5487	308/508	Understand and apply the principles, practices and legislation for the inspection, testing, commissioning, approving and certification of electrical installations in dwellings	5

5.3 Candidate progress record

Units	301/501	302/502	303/503	304/504	305/505	306/506	307/507	308/508
Credits	4	4	3	1	3	4	3	5

Minimum 27 credits

I confirm that the evidence supplied for the above units is authentic and a true representation of my own work. The work logged in the following pages is my own work carried out during my normal work duties.

The answers in the question bank are my own work and discussed with my assessor on completion. I have been observed in my workplace by my assessor on several occasions.

Candidate name:	
Candidate signature:	
Date:	

I confirm that this candidate has achieved all the requirements of this qualification with the evidence listed. Assessment was conducted under the specified conditions and context, and is valid, authentic, reliable, current and sufficient.

Assessor name:	
Assessor signature:	
Date:	

IQA name:	
IQA signature:	
Date:	

5.4 Skill scan/Initial assessment

Qualification title: **Level 3 Certificate in Installing, Testing and Ensuring Compliance of Electrical Installations in Dwellings**

Qualification number: **2397-30**

Candidate name: _____

Unit	Duties	Examples	Training required
301/501	Understand and apply health and safety legislation, practices and procedures 'electrical installation in dwellings'		
	Apply relevant health and safety legislation in the workplace		
	Assess the work environment for hazards and identify remedial actions in accordance with health and safety legislation		
	Apply methods and procedures to ensure work on site is in accordance with health and safety legislation		
302/502	Understand and apply environmental legislation, working practices and the principles of environmental technology systems associated with electrical installations in dwellings		
	Apply environmental legislation, working practices and principles for electrical installations in dwellings		
	Apply work methods and procedures to reduce material wastage and the impact of work activities on the work environment		
303/503	Understand and apply the practices and procedures for overseeing and organising the work environment when installing electrical installations in dwellings		
	Provide relevant people with technical and functional information for work on electrical systems and equipment in dwellings.		
	Oversee health and safety during work on electrical installations in dwellings		

	Co-ordinate liaison with other relevant persons during work activities.		
	Organise and oversee work activities and operations		
304/504	Electrotechnical occupational competence - approval of electrical installations in dwellings		
	Interpret specifications, drawings and diagrams		
	Be able to undertake risk assessments		
	Carry out the safe isolation of electrical circuits and complete electrical installations		
	To complete the visual inspection, initial verification and certification of an electrical installation		
	Complete the testing and certification of an electrical installation in a dwelling in accordance with industry requirements		
	Diagnose, and recommend how to rectify, electrical faults in an electrical installation in accordance with industry requirements		
305/505	Understanding and applying the principles, practices and procedures for the planning, preparation and selection of wiring systems and electrotechnical equipment in dwellings		
	Confirm the electrical supply is in accordance with the installation specification		
	Confirm that planned work is in accordance with the installation specification		
306/506	Understand and apply the principles, practices and legislation for diagnosing and correcting electrical faults in electrical installations in dwellings		
	Confirm safety of the system and equipment prior to diagnosing and correcting electrical faults in accordance with statutory and non-statutory regulations		
	Carry out procedures to identify faults on electrical installations in dwellings		
	Correct faults on electrical installations in dwellings		

307/707	Understand and apply the practices and procedures for the installation and connection of wiring systems and electrotechnical equipment in dwellings		
	Prepare the working environment for the installation of wiring systems, enclosures and associated equipment		
	Correctly interpret appropriate information for the installation of wiring systems, enclosures and associated equipment in dwellings		
	Install wiring systems, enclosures, associated equipment and accessories safely, in accordance with the installation specification		
	Terminate and connect conductors, cables, and flexible cords in electrical wiring systems and equipment in dwellings		
308/508	Understand and apply the principles, practices and legislation for the inspection, testing, commissioning, approving and certification of electrical installations in dwellings		
	Confirm safety of the system and equipment prior to completion of inspection, testing and commissioning in accordance with statutory and non statutory regulations		
	Inspect electrical installations in dwellings		
	To test electrical installations in dwellings		
	Commission and approve electrical installations in dwellings in accordance with statutory and non-statutory regulations		

5.5 Tracking document

To achieve the **Level 3 Certificate in Installing, Testing and Ensuring Compliance of Electrical Installations in Dwellings (2397-30)** learners must achieve **27** credits from the mandatory units below.

City & Guilds unit	Unit title	Assessment type	Unit achieved Yes/No	Assessor initials	Date
Mandatory group					
301/501	Understand and apply health and safety legislation, practices and procedures 'electrical installation in dwellings'	Online and Assignment			
302/502	Understand and apply environmental legislation, working practices and the principles of environmental technology systems associated with electrical installations in dwellings	Online and Assignment			
303/503	Understand and apply the practices and procedures for overseeing and organising the work environment when installing electrical installations in dwellings	Online and Assignment			
304	Electrotechnical occupational competence – approval of electrical installations in dwellings	Assignment			
305/505	Understanding and applying the principles, practices and procedures for the planning, preparation and selection of wiring systems and electrotechnical equipment in dwellings	Online and Assignment			
306/506	Understand and apply the principles, practices and legislation for diagnosing and correcting electrical faults in electrical installations in dwellings	Online and Assignment			
307/507	Understand and apply the practices and procedures for the installation and connection of wiring systems and electrotechnical equipment in dwellings	Online and Assignment			
308/508	Understand and apply the principles, practices and legislation for the inspection, testing, commissioning, approving and certification of electrical installations in dwellings	Online and Assignment			

5.6 On site assessment plan/feedback

Portfolio evidence reference:	
--------------------------------------	--

Candidate name:		Date:	
------------------------	--	--------------	--

Candidate prepared for assessment	Yes / No	Candidate requires support	Yes / No
Candidate briefed on appeals procedure	Yes / No	Support required	Yes / No

Assessment location/address and postcode:

Type of work to be carried out:

Assessor feedback:
(Use Assessor continuation sheet if required)

Forward Planning:

Candidate signature:	Date:
Assessor name:	Assessor signature: Date:
IQA name:	IQA signature: Date:

5.7 On site observation report



Portfolio evidence reference:	
--------------------------------------	--

Candidate name:		Date:	
------------------------	--	--------------	--

Candidate prepared for assessment	Yes / No	Candidate requires support	Yes / No
Candidate briefed on appeals procedure	Yes / No	Support required	Yes / No

Assessment location/address and postcode:

Learning outcome reference	Assessor observation: (Use Assessor continuation sheet if required)

Candidate signature:		Date:
Assessor name:	Assessor signature:	Date:
IQA name:	IQA signature:	Date:

5.8 Supplementary evidence sheet



Unit number:		Portfolio evidence reference:	
Candidate name:		Date:	

Completed by: (please tick)

Candidate:

 Work-based Recorder

 Witness

Learning outcome reference	Written evidence:

Reading taken (eg flow rates, pressure, temperature):

Candidate signature:		Date:
Assessor/Work-Based Recorder name:		Date:
Assessor/Work-Based Recorder signature:		Date:
IQA name:	IQA signature:	Date:

Unit number:		Portfolio evidence reference:	
Candidate name:		Date:	

Assessor question:	Candidate answer:

Assessor feedback:

Candidate signature:		Date:
Assessor name:	Assessor signature:	Date:
IQA name:	IQA signature:	Date:

5.10 Photographic supplementary evidence sheet

Unit number:		Portfolio evidence reference:	
Candidate name:		Date:	

Brief description of task being carried out in the photograph (to be completed by the candidate):

(Attach photo in this box)

Where the photograph was taken:

Candidate signature:		Date:
Assessor name:	Assessor signature:	Date:
IQA name:	IQA signature:	Date:

5.11 Signature sheet



Anyone who witnesses and signs the candidate's evidence must provide a specimen signature in the table below

Witnesses relationship to candidate eg supervisor, customer, lecturer, assessor	Name	Signature	Date

Unit 301/501 Understand and apply health and safety legislation, practices and procedures 'electrical installation in dwellings'

4 credits

Level: 3
UAN H/504/4494

Learning outcomes

1. Be able to apply relevant health and safety legislation in the workplace.
2. Be able to assess the work environment for hazards and identify remedial actions in accordance with health and safety legislation.
3. Be able to apply methods and procedures to ensure work on site is in accordance with health and safety legislation.

Unit 301/501 Understand and apply health and safety legislation, practices and procedures 'electrical installation in dwellings'

Assessment Plan

Candidate name: **Date of plan:**

Description of work (what task are you to be assessed on?):

Target date:

How did you prove competence? What form does the evidence take and where is it recorded?

Candidate signature: **Date:**

Assessor signature: **Date:**

IQA signature: **Date:**

Unit 301/501 Understand and apply health and safety legislation, practices and procedures 'electrical installation in dwellings'

Outcome 1 Be able to apply relevant health and safety legislation in the workplace

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
1.1 identify which workplace health and safety procedures are relevant to the working environment and comply with their duties and obligations as defined by current legislation and organisational procedures						
1.2 produce a risk assessment and method statement in accordance with organisational procedures and the limits of their responsibility						
1.3 work within the requirements of: <ul style="list-style-type: none"> a. risk assessments b. method statements c. safe systems of work. 						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 301/501 Understand and apply health and safety legislation, practices and procedures 'electrical installation in dwellings'

Outcome 2 Be able to assess the work environment for hazards and identify remedial actions in accordance with health and safety legislation

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
2.1 identify unsafe situations and conditions and take remedial actions						
2.2 assess the work environment and revise work practices accordingly to take into account hazards which could cause harm, including the handling of potentially hazardous: a. materials b. tools c. equipment						
2.3 identify any hazards which may present a high risk and report their presence to relevant persons who have overall responsibility for health and safety in the workplace						
2.4 apply measures to control health and safety hazards in accordance with the limits of their capabilities and job responsibility						
2.5 select and use correct personal protective equipment and protection measures to ensure the health and safety of themselves and others in the work environment.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 301/501 Understand and apply health and safety legislation, practices and procedures 'electrical installation in dwellings'

Outcome 3 Be able to apply methods and procedures to ensure work on site is in accordance with health and safety legislation

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
3.1 demonstrate personal conduct and behaviour around the workplace, to ensure that the health and safety of themselves and others is not endangered						
3.2 apply procedures to ensure the safe use, maintenance and storage of tools, plant and equipment as stipulated in: a. workplace policies (company and site) b. supplier and manufacturer information instructions						
3.3 comply with hazard warning, mandatory instruction and prohibition notices						
3.4 apply procedures to ensure the safety of the work location through the correct use of guards and notices						
3.5 use access equipment correctly						
3.6 demonstrate the correct procedures to follow in the event of injury to themselves or others, including: a. application of basic first aid procedures b. notification of emergency services c. reporting of incidents.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 301/501 Understand and apply health and safety legislation, practices and procedures 'electrical installation in dwellings'

Range requirements

List a site and date where you covered the item on the list below.

Description	Site	Date
1. Risk assessments		
2. Method statements		
3. Safe systems of work		
4. Alarm and evacuation procedures		
5. Firefighting procedures		
6. First Aid procedures		
7. Customers/Clients		
8. Unsafe situations		
9. Personal Protective Equipment		
10. Stepladders		
11. Extension ladders		
12. System scaffolding		
13. Scafftag		
14. Storage container		
15. Van vault		

Unit 301/501 Understand and apply health and safety legislation, practices and procedures 'electrical installation in dwellings'

Declaration

I confirm that the evidence supplied for the above listed unit is authentic and a true representation of my own work. The work logged is my own work carried out during my normal work duties.

The answers in the question bank are my own work and discussed with my assessor on completion. I have been observed in my workplace by my assessor on several occasions.

Candidate name:	
Candidate signature:	
Date:	

I confirm that this candidate has achieved all the requirements of this unit with the evidence listed. Assessment was conducted under the specified conditions and context, and is valid, authentic, reliable, current and sufficient.

Assessor name:	
Assessor signature:	
Date:	

IQA name:	
IQA signature:	
Date:	

Unit 302/502 Understand and apply environmental legislation, working practices and the principles of environmental technology systems associated with electrical installations in dwellings

4 credits

Level: 3
UAN: D/504/4493

Learning outcomes

1. Be able to apply environmental legislation, working practices and principles for electrical installations in dwellings.
2. Be able to apply work methods and procedures to reduce material wastage and the impact of work activities on the work environment.

Unit 302/502 Applying environmental legislation, working practices and the principles of environmental technology systems associated with electrical installations in dwellings

Assessment Plan

Candidate name: Date of plan:

Description of work (what task are you to be assessed on?):

Target date:

How did you prove competence? What form does the evidence take and where is it recorded?

Candidate signature: Date:

Assessor signature: Date:

IQA signature: Date:

Unit 302/502 Understand and apply environmental legislation, working practices and the principles of environmental technology systems associated with electrical installations in dwellings

Outcome 1 Be able to apply environmental legislation, working practices and principles for electrical installations in dwellings

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
1.1 demonstrate workplace procedures for the safe handling, storage and disposal of hazardous materials and products, in accordance with any of the following: a. Environmental Protection Act b. the Hazardous Waste Regulations c. Pollution Prevention and Control Act d. Control of Pollution Act e. the Control of Noise at Work Regulations f. Packaging (Essential Requirements) Regulations g. Environment Act h. the Waste Electrical and Electronic Equipment Regulations						
1.2 demonstrate work practices and procedures which are in accordance with the requirements for electrical installations in dwellings as specified in the relevant sections of the Building Regulations and the Guide for Sustainable Homes						
1.3 demonstrate appropriate organisational procedures for reporting environmental hazards.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 302/502 Understand and apply environmental legislation, working practices and the principles of environmental technology systems associated with electrical installations in dwellings

Outcome 2 Be able to apply work methods and procedures to reduce material wastage and the impact of work activities on the work environment

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
2.1 demonstrate prefabrication and installation methods which can help to reduce material wastage						
2.2 identify and use environmentally friendly materials, products and procedures for the installation and maintenance of wiring systems and electrotechnical equipment in dwellings.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 302/502 Applying environmental legislation, working practices and the principles of environmental technology systems associated with electrical installations in dwellings

Range requirements

List a site and date where you covered the item on the list below.

Description	Site	Date
1. Hazardous substance		
2. Solar panel		
3. Invertor		
4. Generation meter		
5. AC isolator		
6. DC isolator		

Unit 302/502 Understand and apply environmental legislation, working practices and the principles of environmental technology systems associated with electrical installations in dwellings

Declaration

I confirm that the evidence supplied for the above listed unit is authentic and a true representation of my own work. The work logged is my own work carried out during my normal work duties.

The answers in the question bank are my own work and discussed with my assessor on completion. I have been observed in my workplace by my assessor on several occasions.

Candidate name:	
Candidate signature:	
Date:	

I confirm that this candidate has achieved all the requirements of this unit with the evidence listed. Assessment was conducted under the specified conditions and context, and is valid, authentic, reliable, current and sufficient.

Assessor name:	
Assessor signature:	
Date:	

IQA name:	
IQA signature:	
Date:	

Unit 303/503 Understand and apply the practices and procedures for overseeing and organising the work environment when installing electrical installations in dwellings

3 credits

Level: 3
UAN: K/504/4898

Learning outcomes

1. Be able to provide relevant people with technical and functional information for work on electrical systems and equipment in dwellings.
2. Be able to oversee health and safety during work on electrical installations in dwellings.
3. Be able to co-ordinate liaison with other relevant persons during work activities.
4. Be able to organise and oversee work activities and operations.

Unit 303/503 Understand and apply the practices and procedures for overseeing and organising the work environment when installing electrical installations in dwellings

Assessment Plan

Candidate name: **Date of plan:**

Description of work (what task are you to be assessed on?):

Target date:

How did you prove competence? What form does the evidence take and where is it recorded?

Candidate signature: **Date:**

Assessor signature: **Date:**

IQA signature: **Date:**

Unit 303/503 Understand and apply the practices and procedures for overseeing and organising the work environment when installing electrical installations in dwellings

Outcome 1 Be able to provide relevant people with technical and functional information for work on electrical systems and equipment in dwellings

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
1.1 identify the relevant people who need to be supplied with technical and functional information						
1.2 identify any additional information that may also be required such as: a. health and safety information b. isolation procedures for products/equipment in case of emergencies						
1.3 liaise with relevant people to determine the information they require to ensure that systems, equipment or components can be operated safely and effectively						
1.4 identify appropriate technical and functional information that is required for the work activity.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 303/503 Understand and apply the practices and procedures for overseeing and organising the work environment when installing electrical installations in dwellings

Outcome 2 Be able to oversee health and safety during work on electrical installations in dwellings

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
2.1 produce risk assessments and method statements, to cover their own work and others working in the area (colleagues and other operatives) in accordance with their level of responsibility						
2.2 follow procedures to confirm that work is being completed in accordance with health and safety legislation and industry standards.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Outcome 3 Be able to co-ordinate liaison with other relevant persons during work activities

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
3.1 comply with approved procedures to ensure effective co-ordination with other workers/contractors, including steps to resolve issues which are outside the scope of their job role						
3.2 apply communication techniques that are clear, accurate and appropriate to the situation.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 303/503 Understand and apply the practices and procedures for overseeing and organising the work environment when installing electrical installations in dwellings

Outcome 4 Be able to organise and oversee work activities and operations

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
4.1 organise operatives by allocating duties and responsibilities to make the best use of their competence						
4.2 monitor the work of operatives to ensure it is in accordance with: <ul style="list-style-type: none"> a. industry working practices b. programme of work c. health and safety requirements 						
4.3 apply the correct procedures when a non compliance is identified during the completion of work activities.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 303/503 Understand and apply the practices and procedures for overseeing and organising the work environment when installing electrical installations in dwellings

Range requirements

List a site and date where you covered the item on the list below.

Description	Site	Date
1. Manufacturer's instructions		
2. Supplier documentation		
3. Information from your employer or client		
4. Installation specifications		
5. Specifications, drawings and diagram		
6. Waste disposal procedures		
7. Equipment and material storage		
8. Access by personnel		
9. Supply technical and functional information		
10. Health & safety policy statement		

Unit 303/503 Understand and apply the practices and procedures for overseeing and organising the work environment when installing electrical installations in dwellings

Declaration

I confirm that the evidence supplied for the above listed unit is authentic and a true representation of my own work. The work logged is my own work carried out during my normal work duties.

The answers in the question bank are my own work and discussed with my assessor on completion. I have been observed in my workplace by my assessor on several occasions.

Candidate name:	
Candidate signature:	
Date:	

I confirm that this candidate has achieved all the requirements of this unit with the evidence listed. Assessment was conducted under the specified conditions and context, and is valid, authentic, reliable, current and sufficient.

Assessor name:	
Assessor signature:	
Date:	

IQA name:	
IQA signature:	
Date:	

Unit 304

Electrotechnical occupational competence - approval of electrical installations in dwellings

1 credit

Level: 3
UAN: R/504/4491

Learning outcomes

1. Be able to interpret specifications, drawings and diagrams.
2. Be able to undertake risk assessments.
3. Be able to carry out the safe isolation of electrical circuits and complete electrical installations.
4. Be able to complete the visual inspection, initial verification and certification of an electrical installation.
5. Be able to complete the testing and certification of an electrical installation in a dwelling in accordance with industry requirements.
6. Be able to diagnose, and recommend how to rectify, electrical faults in an electrical installation in accordance with industry requirements.

Unit 304

Electrotechnical occupational competence - approval of electrical installations in dwellings

Assessment Plan

Candidate name: **Date of plan:**

Description of work (what task are you to be assessed on?):

Target date:

How did you prove competence? What form does the evidence take and where is it recorded?

Candidate signature: **Date:**

Assessor signature: **Date:**

IQA signature: **Date:**

Unit 304

Electrotechnical occupational competence - approval of electrical installations in dwellings

Outcome 1 Be able to interpret specifications, drawings and diagrams

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
1.1 interpret specifications and technical data for the inspection and functional testing of: <ul style="list-style-type: none"> a. protective earthing systems b. a ring final circuit c. a general lighting circuit d. three-phase motor circuit e. intruder alarm circuit. 						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Outcome 2 Be able to undertake risk assessments

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
2.1 review safe working practices						
2.2 undertake a risk assessment						
2.3 complete risk assessment documentation in accordance with organisational procedures.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 304

Electrotechnical occupational competence - approval of electrical installations in dwellings

Outcome 3 Be able to carry out the safe isolation of electrical circuits and complete electrical installations

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
3.1 locate correct means of isolation						
3.2 follow correct procedures for the isolation of electrical circuit(s) and complete electrical installations						
3.3 isolate circuit(s) in correct sequence						
3.4 select correct test and measuring instruments						
3.5 correctly test for the presence of an electrical supply.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Outcome 4 Be able to complete the visual inspection, initial verification and certification of an electrical installation

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
4.1 comply with correct procedures						
4.2 record relevant findings on correct documentation: <ul style="list-style-type: none"> a. electrical installation certificates b. minor electrical installation works certificates c. schedules of inspections d. schedules of test results. 						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 304

Electrotechnical occupational competence - approval of electrical installations in dwellings

Outcome 5 Be able to complete the testing and certification of an electrical installation in a dwelling in accordance with industry requirements

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
5.1 select and use the correct measuring instruments						
5.2 confirm instruments function accurately						
5.3 measure the continuity of protective conductors						
5.4 measure the continuity of ring final circuit conductors						
5.5 measure the insulation resistance of the installation and its circuits						
5.6 confirm the polarity of the installation's electrical outlets and components						
5.7 determine the installation's Earth Fault-Loop Impedance (EFLI)						
5.8 determine the installation's Prospective Fault Current (PFC)						
5.9 carry out functional tests on the installation's equipment and components						
5.10 complete the correct documentation in accordance with statutory and non-statutory regulations: <ul style="list-style-type: none"> a. electrical installation certificates b. minor electrical installation works certificates c. schedules of inspections d. schedules of test results. 						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 304

Electrotechnical occupational competence - approval of electrical installations in dwellings

Outcome 6 Be able to diagnose, and recommend how to rectify, electrical faults in an electrical installation in accordance with industry requirements

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
6.1 undertake an assessment of risk accordingly						
6.2 carry out safe isolation in the correct sequence as appropriate to fault diagnosis procedures						
6.3 select and use correctly, fit for purpose tools, equipment and instruments						
6.4 carry out relevant checks and preparations						
6.5 locate faults from given information						
6.6 state how the identified faults can be rectified.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 304

Electrotechnical occupational competence - approval of electrical installations in dwellings

Declaration

I confirm that the evidence supplied for the above listed unit is authentic and a true representation of my own work. The work logged is my own work carried out during my normal work duties.

The answers in the question bank are my own work and discussed with my assessor on completion. I have been observed in my workplace by my assessor on several occasions.

Candidate name:	
Candidate signature:	
Date:	

I confirm that this candidate has achieved all the requirements of this unit with the evidence listed. Assessment was conducted under the specified conditions and context, and is valid, authentic, reliable, current and sufficient.

Assessor name:	
Assessor signature:	
Date:	

IQA name:	
IQA signature:	
Date:	

Unit 305/505 Understanding and applying the principles, practices and procedures for the planning, preparation and selection of wiring systems and electrotechnical equipment in dwellings

4 credits

Level: 3
UAN: T/504/5469

Learning outcomes

1. Be able to confirm the electrical supply is in accordance with the installation specification.
2. Be able to be able to confirm that planned work is in accordance with the installation specification.

Unit 305/505 Understanding and applying the principles, practices and procedures for the planning, preparation and selection of wiring systems and electrotechnical equipment in dwellings

Assessment Plan

Candidate name: **Date of plan:**

Description of work (what task are you to be assessed on?):

Target date:

How did you prove competence? What form does the evidence take and where is it recorded?

Candidate signature: **Date:**

Assessor signature: **Date:**

IQA signature: **Date:**

Unit 305/505 Understanding and applying the principles, practices and procedures for the planning, preparation and selection of wiring systems and electrotechnical equipment in dwellings

Outcome 1 Be able to confirm the electrical supply is in accordance with the installation specification

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
1.1 verify the compatibility of the electrical supply to the requirements of the installation specification						
1.2 identify the earthing arrangement for the electrical installation.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Outcome 2 Be able to confirm that planned work is in accordance with the installation specification

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
2.1 verify that cable types and sizes meet the requirements of the installation specification						
2.2 verify that protective devices meet the requirements of the installation specification						
2.3 verify that enclosures, equipment and accessories meet the requirements of the installation specification.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 305/505 Understanding and applying the principles, practices and procedures for the planning, preparation and selection of wiring systems and electrotechnical equipment in dwellings

Range requirements

List a site and date where you covered the item on the list below.

	Description	Site	Date
1.	Single phase electrical supplies		
2.	Three phase and neutral supplies		
3.	TN-S		
4.	TN-C-S		
5.	TT		
6.	Main earthing terminal		
7.	Main earthing conductor		
8.	Exposed conductive part		
9.	Extraneous conductive part		
10.	Discrimination between devices		
11.	Discrimination		
12.	RCDs/RCBOs		
13.	Circuit breakers		
14.	Earth fault loop impedance		
15.	Protective Multiple Earthing (PME)		

Unit 305/505 Understanding and applying the principles, practices and procedures for the planning, preparation and selection of wiring systems and electrotechnical equipment in dwellings

Declaration

I confirm that the evidence supplied for the above listed unit is authentic and a true representation of my own work. The work logged is my own work carried out during my normal work duties.

The answers in the question bank are my own work and discussed with my assessor on completion. I have been observed in my workplace by my assessor on several occasions.

Candidate name:	
Candidate signature:	
Date:	

I confirm that this candidate has achieved all the requirements of this unit with the evidence listed. Assessment was conducted under the specified conditions and context, and is valid, authentic, reliable, current and sufficient.

Assessor name:	
Assessor signature:	
Date:	

IQA name:	
IQA signature:	
Date:	

**Unit 306/506 Understand and apply the principles,
practices and legislation for diagnosing and
correcting electrical faults in electrical
installations in dwellings**

4 credits

Level: 3

UAN M/504/5471

Learning outcomes

1. Be able to confirm safety of the system and equipment prior to diagnosing and correcting electrical faults in accordance with statutory and non-statutory regulations.
2. Be able to carry out procedures to identify faults on electrical installations in dwellings.
3. Be able to correct faults on electrical installations in dwellings.

**Unit 306/506 Understand and apply the principles,
practices and legislation for diagnosing and
correcting electrical faults in electrical
installations in dwellings**

Assessment Plan

Candidate name: Date of plan:

Description of work (what task are you to be assessed on?):

Target date:

How did you prove competence? What form does the evidence take and where is it recorded?

Candidate signature: Date:

Assessor signature: Date:

IQA signature: Date:

Unit 306/506 Understand and apply the principles, practices and legislation for diagnosing and correcting electrical faults in electrical installations in dwellings

Outcome 1 Be able to confirm safety of the system and equipment prior to diagnosing and correcting electrical faults in accordance with statutory and non-statutory regulations

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
1.1 carry out safe isolation procedures in accordance with regulatory requirements for electrical installations						
1.2 ensure the health and safety of themselves and others within the work location during inspection, testing and commissioning						
1.3 select and use appropriate warning notices and barriers						
1.4 check the safety of electrical systems prior to the commencement of diagnosing and correcting electrical faults.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Outcome 2 Be able to carry out procedures to identify faults on electrical installations in dwellings

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
2.1 use effective methods of communication to ascertain clear and detailed information about reported faults and any components which require replacing						
2.2 identify and use appropriate system specification documents which relate to the electrotechnical systems and equipment being worked upon						
2.3 report information about potential disruption that may be a consequence of fault diagnosis and correction work to relevant people, such as: <ul style="list-style-type: none"> a. other workers/colleagues b. customers/clients 						
2.4 assess the safe working practices which apply in the working environment to confirm that it is safe for fault identification work to take place						
2.5 perform suitable diagnostic tests on the installed electrotechnical systems to successfully identify faults including: <ul style="list-style-type: none"> a. loss of supply b. overload c. short-circuit and earth fault d. transient voltage e. high resistance joints f. component, accessory or equipment faults 						
2.6 use appropriate methods for locating faults on electrical systems and equipment, including: <ul style="list-style-type: none"> a. procedures and sequences – logical approach b. safe working practices c. interpretation of data 						
2.7 use appropriate tools and instruments correctly to complete fault diagnosis work, including: <ul style="list-style-type: none"> a. voltage indicator b. low resistance ohm meter c. insulation resistance testers d. EFLI and PFC tester e. RCD tester f. tong tester/clamp on ammeter 						
2.8 confirm test instruments are fit for purpose, functioning correctly and are correctly calibrated.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Outcome 3 Be able to correct faults on electrical installations in dwellings

Assessment criteria (Performance)	Evidence date					
The learner can:	Portfolio reference					
3.1 confirm appropriate repairs, removals and replacements and their implications with relevant people including: <ul style="list-style-type: none"> a. other workers/colleagues b. customers/clients 						
3.2 perform fault correction procedures correctly and safely using appropriate tools, equipment and material						
3.3 perform the removal and replacement of components and associated equipment from electrotechnical systems to ensure: <ul style="list-style-type: none"> a. ease of access to enable future maintenance b. accordance with: <ul style="list-style-type: none"> - relevant regulations - manufacturer's instructions - organisational procedures 						
3.4 apply appropriate procedures to ensure electrotechnical systems, equipment and components are left safe, in accordance with industry regulations, if the fault cannot be corrected immediately						
3.5 perform appropriate inspection and testing procedures to confirm that systems, equipment and components are functioning correctly after completion of fault correction work						
3.6 record test results and other appropriate information regarding the fault correction work clearly and accurately and report to relevant people, such as: <ul style="list-style-type: none"> a. other workers/colleagues b. customers/clients c. representatives of other services. 						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 306/506 Understand and apply the principles, practices and legislation for diagnosing and correcting electrical faults in electrical installations in dwellings

Range requirements

List a site and date where you covered the item on the list below.

Description	Site	Date
1. Effective communication with co-workers		
2. Positioning of notices		
3. Loss of supply		
4. High resistance		
5. Transient voltages		
6. Insulation failure		
7. Excess current		
8. Short-circuit		
9. Open Circuit		
10. Electronic devices (damage by over voltage)		
11. IT equipment (eg shutdown, damage)		

Unit 306/506 Understand and apply the principles, practices and legislation for diagnosing and correcting electrical faults in electrical installations in dwellings

Declaration

I confirm that the evidence supplied for the above listed unit is authentic and a true representation of my own work. The work logged is my own work carried out during my normal work duties.

The answers in the question bank are my own work and discussed with my assessor on completion. I have been observed in my workplace by my assessor on several occasions.

Candidate name:	
Candidate signature:	
Date:	

I confirm that this candidate has achieved all the requirements of this unit with the evidence listed. Assessment was conducted under the specified conditions and context, and is valid, authentic, reliable, current and sufficient.

Assessor name:	
Assessor signature:	
Date:	

IQA name:	
IQA signature:	
Date:	

Unit 307/507 Understand and apply the practices and procedures for the installation and connection of wiring systems and electrotechnical equipment in dwellings

3 credits

Level: 3
UAN: T/504/5472

Learning outcomes

1. Be able to prepare the working environment for the installation of wiring systems, enclosures and associated equipment.
2. Be able to correctly interpret appropriate information for the installation of wiring systems, enclosures and associated equipment in dwellings.
3. Be able to install wiring systems, enclosures, associated equipment and accessories safely, in accordance with the installation specification.
4. Be able to terminate and connect conductors, cables, and flexible cords in electrical wiring systems and equipment in dwellings.
5. Be able to confirm any variations to the installation specification or planned programme of work.

Unit 307/507 Understand and apply the practices and procedures for the installation and connection of wiring systems and electrotechnical equipment in dwellings

Assessment Plan

Candidate name: **Date of plan:**

Description of work (what task are you to be assessed on?):

Target date:

How did you prove competence? What form does the evidence take and where is it recorded?

Candidate signature: **Date:**

Assessor signature: **Date:**

IQA signature: **Date:**

Unit 307/507 Understand and apply the practices and procedures for the installation and connection of wiring systems and electrotechnical equipment in dwellings

Outcome 1 Be able to prepare the working environment for the installation of wiring systems, enclosures and associated equipment

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
1.1 ensure the health and safety of themselves and others within the work location						
1.2 identify and use suitable personal protective equipment throughout the completion of work activities						
1.3 complete preparatory work for the installation of electrical systems, enclosures and associated equipment, to include: <ul style="list-style-type: none"> a. interpretation of installation specifications to produce material and equipment requisites b. identification and selection of material, equipment and components which are compatible with the installation specification c. identification of suitable methods, procedures and practices d. confirmation of site readiness for installation work to begin e. confirmation of secure site storage facilities for tools, equipment, materials and components f. confirmation that safe isolation has been carried out (if appropriate) in accordance with regulatory requirements g. completion of a risk assessment. 						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 307/507 Understand and apply the practices and procedures for the installation and connection of wiring systems and electrotechnical equipment in dwellings

Outcome 2 Be able to correctly interpret appropriate information for the installation of wiring systems, enclosures and associated equipment in dwellings

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
2.1 use information and documentation that is current and relevant to the work required, including: <ul style="list-style-type: none"> a. installation specifications b. work schedules c. work programmes d. regulatory documents (including current version of the IET Wiring Regulations and relevant guidance notes) e. method statements f. manufacturer's instructions 						
2.2 use documentation to confirm that materials and equipment is of the correct quantity and is free from damage, including: <ul style="list-style-type: none"> a. materials schedules b. operating instructions c. tools and instruments 						
2.3 use appropriate procedures to record: <ul style="list-style-type: none"> a. contract variations b. site instructions 						
2.4 demonstrate that authorisation has been obtained from the relevant person(s) prior to commencement of the work, including: <ul style="list-style-type: none"> a. other workers b. customers/clients 						
2.5 produce a record of any pre work damage or defects to existing equipment or building features, and report to the relevant person (customer, client, site manager, line manager).						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Outcome 3 Be able to install wiring systems, enclosures, associated equipment and accessories safely, in accordance with the installation specification

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
3.1 ensure that the planned locations for the wiring system(s) and its associated equipment are compatible with other site services requirements						
3.2 use different measuring and marking out techniques which are appropriate to the wiring system, wiring enclosure and/or associated equipment that is being installed						
3.3 ensure that the planned locations are visually acceptable and in accordance with the installation specification						
3.4 produce a planned programme of work for the fitting and fixing of wiring systems, wiring enclosures, associated equipment and accessories in accordance with: <ul style="list-style-type: none"> a. a safe system of work b. co-ordination with other trades c. relevant regulations (eg IET Wiring Regulations, Building Regulations) d. Installation specification e. manufacturers' instructions 						
3.5 install the following in accordance with the IEE Wiring Regulations, the installation specification and agreed planned programme of work: <ul style="list-style-type: none"> a. thermosetting insulated cables including flexes b. single and multicore thermoplastic (PVC) and thermosetting insulated cables c. PVC/PVC flat profile cable d. SWA/PVC cable e. armoured/braided flexible cables and cords f. fire resistant cable 						
3.6 install the following in accordance with the IET Wiring Regulations, the installation specification and agreed planned programme of work: <ul style="list-style-type: none"> a. conduit (PVC and metallic) b. trunking (PVC and metallic) 						

3.7	install the following types of electrical equipment and accessories, in accordance with the IEE Wiring Regulations, the installation specification, manufacturers' instructions and the agreed planned programme of work: a. isolators and switches b. socket-outlets c. consumer units d. earthing fault and overcurrent protective devices e. luminaires f. auxiliary equipment (eg heating/water system components)						
3.8	dispose of unwanted material and equipment in accordance with site procedures and statutory requirements.						
Type of evidence →							
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report							

Outcome 4 Be able to terminate and connect conductors, cables, and flexible cords in electrical wiring systems and equipment in dwellings

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
4.1 specify the health and safety requirements appropriate to terminating and connecting conductors, cables and flexible cords in electrical wiring systems and equipment, including: a. selection and use of tools b. PPE c. risk assessment d. reporting of unsafe situations e. adherence to relevant statutory and non-statutory regulations						
4.2 interpret and apply the techniques and methods for the safe and effective termination and connection of: a. thermosetting insulated cables including flexes b. single and multicore thermoplastic (PVC) and thermosetting insulated cables c. PVC/PVC flat profile cable d. SWA/PVC cable e. armoured/braided flexible cables and cords f. fire resistant cable.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Outcome 5 Be able to confirm any variations to the installation specification or planned programme of work

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
5.1 confirm that, where variations to the installation specification and/or work programme have been identified, appropriate action has been taken after agreement of relevant persons (eg customer, client, site manager)						
5.2 verify that the completed system meets specified requirements in terms of ensuring that components and equipment are of the correct type, fit for purpose and are installed in accordance with the IET Wiring Regulations, the installation specification and as appropriate, with manufacturer instructions.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 307/507 Understand and apply the practices and procedures for the installation and connection of wiring systems and electrotechnical equipment in dwellings

Range requirements

List a site and date where you covered the item on the list below.

	Description	Site	Date
1.	First-fix		
2.	Twin & earth cables		
3.	6491x singles cables		
4.	SWA cables		
5.	Fire resistant (FP200 cables)		
6.	10mm ² green / yellow cables		
7.	Metal KO boxes		
8.	Lighting accessories (wall mounted)		
9.	Lighting accessories (ceiling mounted)		
10.	Power sockets		
11.	Spur units		
12.	Consumer units		
13.	Circuit breakers		
14.	RCDs		
15.	RCBOs		
16.	Meter tails		

Unit 307/507 Understand and apply the practices and procedures for the installation and connection of wiring systems and electrotechnical equipment in dwellings

Declaration

I confirm that the evidence supplied for the above listed unit is authentic and a true representation of my own work. The work logged is my own work carried out during my normal work duties.

The answers in the question bank are my own work and discussed with my assessor on completion. I have been observed in my workplace by my assessor on several occasions.

Candidate name:	
Candidate signature:	
Date:	

I confirm that this candidate has achieved all the requirements of this unit with the evidence listed. Assessment was conducted under the specified conditions and context, and is valid, authentic, reliable, current and sufficient.

Assessor name:	
Assessor signature:	
Date:	

IQA name:	
IQA signature:	
Date:	

Unit 308/508 Understand and apply the principles, practices and legislation for the inspection, testing, commissioning, approving and certification of electrical installations in dwellings

5 credits

Level: 3
UAN A/504/5487

Learning outcomes

1. Be able to confirm safety of the system and equipment prior to completion of inspection, testing and commissioning in accordance with statutory and non-statutory regulations.
2. Be able to inspect electrical installations in dwellings.
3. Be able to test electrical installations in dwellings.
4. Be able to commission and approve electrical installations in dwellings in accordance with statutory and non-statutory regulations.

Unit 308/508 Understand and apply the principles, practices and legislation for the inspection, testing, commissioning, approving and certification of electrical installations in dwellings

Assessment Plan

Candidate name: **Date of plan:**

Description of work (what task are you to be assessed on?):

Target date:

How did you prove competence? What form does the evidence take and where is it recorded?

Candidate signature: **Date:**

Assessor signature: **Date:**

IQA signature: **Date:**

Unit 308/508 Understand and apply the principles, practices and legislation for the inspection, testing, commissioning, approving and certification of electrical installations in dwellings

Outcome 1 Be able to confirm safety of the system and equipment prior to completion of inspection, testing and commissioning in accordance with statutory and non-statutory regulations

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
1.1 carry out safe isolation procedures in accordance with regulatory requirements for electrical installations						
1.2 ensure the health and safety of themselves and others within the work location during inspection, testing and commissioning						
1.3 check the safety of electrical systems prior to the commencement of inspection, testing and commissioning.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Outcome 2 Be able to inspect electrical installations in dwellings

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
2.1 assess whether the safe system of work is appropriate to the work activity						
2.2 carry out a visual inspection in accordance with the requirements of the installation specification, the IET Wiring Regulations and IET Guidance Note 3, that includes: <ul style="list-style-type: none"> a. the installation methods of wiring systems and equipment b. the selection of conductors, cables and cords c. the selection of protective and isolation devices d. routing and identification/labelling of conductors, cables and flexible cords e. presence of means of earthing f. presence of protective conductors and bonding g. isolation h. type and rating of overcurrent protective devices 						
2.3 complete a Schedule of Inspections in accordance with the IET Wiring Regulations and IET Guidance Note 3.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Outcome 3 Be able to test electrical installations in dwellings

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
3.1 select the test instruments and their accessories for the following tests: a. continuity b. insulation resistance c. polarity d. earth fault loop impedance e. prospective fault current f. RCD operation g. functional testing						
3.2 carry out the following tests in accordance with the installation specification and the IET Wiring Regulations and manufacturer’s instructions: a. continuity (eg CPC, ring final circuit) b. insulation resistance c. polarity d. earth fault loop impedance e. prospective fault current f. RCD operation g. functional testing						
3.3 verify test results and report all findings to relevant persons, as appropriate, including: a. representatives of other services/colleagues b. customers/clients						
3.4 complete in accordance with the IET Wiring Regulations and IET Guidance Note 3: a. electrical installation certificates b. minor electrical installation works certificates c. schedules of inspections d. schedules of test results						
3.5 conform in accordance with the IET Wiring Regulations and IET Guidance Note 3, and where appropriate, customer/client requirements, to the procedures and requirements for the recording and retention of completed: a. electrical installation certificates b. minor electrical installation works certificates c. schedules of inspections d. schedules of test results.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Outcome 4 Be able to commission and approve electrical installations in dwellings in accordance with statutory and non-statutory regulations

Assessment criteria	Evidence date					
The learner can:	Portfolio reference					
4.1 clarify the commissioning procedures with relevant persons on site, including: a. representatives of other services/colleagues b. customers/clients						
4.2 carry out the commissioning of circuits, equipment and components to confirm functionality, fit for purpose and safety in accordance with: a. the installation specification b. IET Wiring Regulations c. manufacturer’s instructions d. maintenance schedules e. health and safety requirements						
4.3 demonstrate to the customer/client that the operation of the circuits, equipment and components are in accordance with the installation specification and customer/client requirements						
4.4 complete the handover of electrotechnical systems and equipment to relevant persons including the provision of accurate and complete documentation regarding the completed inspection, testing, commissioning and customer satisfaction						
4.5 carry out the approval of electrical installations in dwellings in accordance with the procedures for notifying ‘Local Authority Building Control’.						
Type of evidence →						
O = Observation WT = Witness Testimony P = Product Q = Questioning PD = Professional Discussion R =Report						

Unit 308/508 Understand and apply the principles, practices and legislation for the inspection, testing, commissioning, approving and certification of electrical installations in dwellings

Range requirements

List a site and date where you covered the item on the list below.

Description	Site	Date
1. Approved voltage indicator to GS38		
2. Proving unit for AVI		
3. Contractors		
4. Relays		
5. Solenoids		
6. Over-current protection devices		
7. Fuses (HRC, cartridge and rewirable)		
8. Circuit-breakers		
9. RCDs		
10. RCBO		
11. Low resistance ohmmeter		
12. Insulation resistance meter		
13. Earth loop impedance tester		
14. RCD tester		

Unit 308/508 Understand and apply the principles, practices and legislation for the inspection, testing, commissioning, approving and certification of electrical installations in dwellings

Declaration

I confirm that the evidence supplied for the above listed unit is authentic and a true representation of my own work. The work logged is my own work carried out during my normal work duties.

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Candidate name:	
Candidate signature:	
Date:	

I confirm that this candidate has achieved all the requirements of this unit with the evidence listed. Assessment was conducted under the specified conditions and context, and is valid, authentic, reliable, current and sufficient.

Assessor name:	
Assessor signature:	
Date:	

IQA name:	
IQA signature:	
Date:	

Appendix 1 **Summary of City & Guilds assessment policies**

Health and Safety

All centres have to make sure that they provide a safe and healthy environment for learning, including induction and assessment. City & Guilds external verifiers check this when they visit assessment centres.

Equal Opportunities

Your centre will have an equal opportunities policy. Your centre will explain this to you during your induction, and may give you a copy of the policy.

City & Guilds equal opportunities policy is available from our website **www.cityandguilds.com**, City & Guilds Customer Relations Team or your centre.

Access to assessment

City & Guilds qualifications are open to all candidates. Some candidates may need extra help with their assessment, for example, a person with a visual impairment may need a reader.

If you think you will need alternative assessment arrangements, you should discuss this with your centre during your induction, and record this on your assessment plan. City & Guilds will allow centres to make alternative arrangements for you if you are eligible and if the qualification allows for this. This must be agreed before you start your qualification.

City & Guilds guidance and regulations document *Access to assessment and qualifications* is available on the City & Guilds website **www.cityandguilds.com**, from the City & Guilds Customer Relations Team or your centre.

Complaints and appeals

Centres must have a policy and procedure to deal with any complaints you may have. You may feel you have not been assessed fairly, or may want to appeal against an assessment decision if you do not agree with your assessor.

These procedures will be explained during induction and you will be provided with information about the Quality Assurance Co-ordinator within your centre who is responsible for this.

Most complaints and appeals can be resolved within the centre, but if you follow the centre procedure and are still not satisfied you can complain to City & Guilds.

Our complaints policy is on our website **www.cityandguilds.com** or is available from the City & Guilds Customer Relations Team or your centre.

City & Guilds
Believe you can



www.cityandguilds.com

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 Land Based Services (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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