



**Electrical Installation (Buildings and Structures)**

**Stage 3 Apprentice Logbook  
(March 2003 standards)**

## Contents

	<u>Page</u>
• Candidate details	2
• Register of Signatories	3
• Assessment / Verification record	4
• Expert witness testimony	5
• Documentary evidence log	6
• NVQ and the JIB Apprenticeship Scheme	7
• Who will be involved in the NVQ ?	9
• How do I fill out the logbook ?	10
• The NVQ Units	12 - 91
• March 2003 - Level 3 National Occupational Standards	92 - 94

**CANDIDATE DETAILS****Personal Details:**

Full Name			
Address			
Post Code		Telephone	
National Insurance Number		NVQ Candidate Number	
Date First registered onto the NVQ			

**Employer Details:**

Employer name			
Address			
Post Code		Telephone	

**Assessment Centre Details:**

Telephone Help line No	
Assessor(s) responsible for candidate	

**REGISTER OF SIGNATORIES**

(Please photocopy this page as necessary)

Please ensure that each person that signs your logbook completes their details in the section below.

<b>NAME</b>	<b>ROLE</b>	<b>DATE</b>	<b>SIGNATURE</b>
	ASSESSOR		
	ASSESSOR		
	INTERNAL VERIFIER		
	AWARDING BODY EXTERNAL VERIFIER		
1	WORK BASED RECORDER		
2	WORK BASED RECORDER		
3	WORK BASED RECORDER		
4	WORK BASED RECORDER		
5	WORK BASED RECORDER		
6	WORK BASED RECORDER		
7	WORK BASED RECORDER		

**ASSESSMENT / VERIFICATION RECORD**

(Shaded boxes represent core units)

Your assessor will use this section to sign off and date each satisfactorily completed unit. For ease of reference, the previous NET unit number has been shown in brackets beneath each unit.

Unit		Print name	Signature	Date
<b>301</b> (18)	A			
	IV			
<b>304</b> (81)	A			
	IV			
<b>305</b> (20)	A			
	IV			
<b>306</b> (23)	A			
	IV			
<b>307</b> (41)	A			
	IV			
<b>308</b> (45)	A			
	IV			
<b>302</b> (54)	A			
	IV			
<b>303</b> (70)	A			
	IV			

## **Stage 3 - Expert Witness Testimony**

This page must be signed by the expert witness to confirm that the apprentice has fully met all of the requirements of this Stage 3 logbook.

An expert witness is the person responsible for the regular & systematic observation and reporting on the apprentice. The expert witness should be a technical person at management/supervisory level within the employing company.

### **EXPERT WITNESS TESTIMONY**

I have checked this **completed** Stage 3 logbook for ..... and would confirm that he/she completed all the tasks required within it and that I agree with the opinion of the WBR who has signed the entries, to confirm that all of the work was completed to a satisfactory standard. I also confirm that he/she can now be advanced to Stage 4 of the JIB Training Scheme.

Employers name		Employers address
Expert witness signature		
PRINT NAME:		
Title		
Date		

**DOCUMENTARY EVIDENCE LOG**

(Shaded boxes represent core units)

Please use this section to record each piece of supplementary evidence that was used to support the job description of each unit. Give each piece of evidence a simple reference number such as 305-1 (Unit ref - Evidence number) and write this in the reference column and also on each piece of evidence.

Remember to make sure that each piece of evidence contains the name of the site or job, is relevant to the task written about and is signed by your Work Based Recorder when required.

Unit	Item No.	Supplementary Evidence Provided	Reference
<b>301</b> (18)	1		
	2		
<b>304</b> (81)	1		
	2		
<b>305</b> (20)	1		
	2		
<b>306</b> (23)	1		
	2		
<b>307</b> (41)	1		
	2		
<b>308</b> (45)	1		
	2		
<b>302</b> (54)	1		
	2		
<b>303</b> (70)	1		
	2		

## NVQ and the JIB Apprenticeship Training Scheme

National Vocational Qualifications (NVQ's) are a system of qualifications introduced by the government and are based upon the measurement of a person's ability to do the job under normal working conditions. In addition to practical and technical competence, they also require you to demonstrate competence in areas such as planning, problem solving and working with people.

In other words, an NVQ is intended to be a qualification that is awarded when you can demonstrate that you are competent to do a job well within the environment of the workplace. It may help to think of it as being a job description detailing all the things that you would expect an electrician to be able to do.

Consequently, the implication is that the most valid evidence of your ability to do all these things will be generated within your individual work situation. In other words, on site.

As a process, you therefore:

- Learn how to do the job, both at the college/training centre and on site.
- Practice those skills both at the college/training centre and on site.
- Demonstrate your competence at those skills.

### *Learning how to do the job*

You will be taught both the practical and knowledge elements of the job. After all, it's no good being able to connect something up if you don't know why you are doing it. This knowledge aspect of the NVQ is currently measured using an approved City & Guilds qualification, taught in a college/training centre and achieved via examinations taken over the early stages of your apprenticeship.

The practical aspect of the job is taught both on site, where you are watching & working with electricians and in the college/training centre with your course tutors.

### *Practicing those skills*

As your training at the college/training centre progresses, you move from receiving basic tuition in the various skill areas to being given a series of more in depth practical exercises to undertake.

At work, the electricians you are working with start to give you more complex tasks to perform as they see you develop your skills. The better you get, then the more interesting those tasks will become.

### *Demonstrating your competence*

This is the most important part. We've already established that we will measure your theory knowledge of the job with the City & Guilds examination. But, we need some tools to measure your practical abilities and as far as you are concerned, the most important of these are the JIB logbooks.

This logbook is provided to you as part of the process of collecting evidence against the National Occupational Standards (NOS) for Electrical Installation (Buildings and Structures) at Level 3.

These standards at NVQ Level 3 cover many trades (such as installation electrician, panel builder, etc) and consist of requirements for each occupation covering the work activities that each trade is likely to undertake. These requirements effectively establish the “job description” for each of those trades that we mentioned earlier.

To make the process more manageable and easier to understand, the requirements are then grouped together in smaller “chunks” known as units. Each unit sets out a precise area of competence to be achieved and also forms the smallest item that may be individually accredited.

This logbook shall be used to record evidence against the following Electrical Installation (Buildings & Structures) units only:

<b>Unit 301</b>	<b>NET Unit 18</b>	<b>Ensure safe site working.</b>
<b>Unit 302</b>	<b>NET Unit 54</b>	<b>Diagnose &amp; correct faults on electrotechnical systems &amp; equipment.</b>
<b>Unit 303</b>	<b>NET Unit 70</b>	<b>Provide technical and functional information.</b>
<b>Unit 304</b>	<b>NET Unit 81</b>	<b>Maintain a healthy and safe working environment.</b>
Unit 305	NET Unit 20	Prepare to install electrical wiring systems, enclosures & equipment.
Unit 306	NET Unit 23	Install electrical wiring systems, enclosures & equipment.
Unit 307	NET Unit 41	Connect wiring systems & equipment using safe & approved methods.
Unit 308	NET Unit 45	Inspect, test & commission an electrical installation.

You should note that the above units are shown numerically for ease. Additionally, certain units have been shown in bold and these are referred to as CORE UNITS. The concept being that core units are deemed common to each trade using the standards and therefore with few exceptions, each trade will complete the same four core units as part of their NVQ Level 3.

However, within the logbook the units have been arranged to roughly represent the sequence of events on a building site from start to completion. Consequently the actual order will be:

**Unit 301**  
**Unit 304**  
 Unit 305  
 Unit 306  
 Unit 307  
 Unit 308  
**Unit 302**  
**Unit 303**

## Who will be involved in the NVQ ?

There is a range of people who will be involved in the process. However, the two main people that you will be dealing with are the ASSESSOR and the WORK BASED RECORDER, who is usually the Electrician that you work with.

Their roles in the system are as follows:

### The Assessor

The Assessor is the person that actually determines whether or not you are competent at the job. However, they will also advise and help you to get the right type and quantity of evidence for this qualification.

As part of the process of demonstrating your competence, the Assessor will visit you, both at the college/training centre, and on site, and will ask you questions about the work activities you are doing or have done.

### The Work Based Recorder

The Work Based Recorder (WBR) is the person who assists an apprentice to correctly record their work and to confirm that, in their opinion, the work recorded was carried out by the apprentice and completed to a satisfactory standard. This occurs by the WBR signing and dating the logbook entry made by the apprentice for authenticity.

The WBR can also give you advice and help with your logbook entries.

There is also a third party involved in this qualification ..... **YOU !**

So please remember, that whereas everyone will help you along the way, this is your qualification and it is ultimately your responsibility to get it.

## How do I fill out the logbook ?

The purpose of the logbook is to help you gather evidence against the National Occupational Standards for NVQ Level 3. Obviously your level of competence will not be very high at the start of the process, but you will gain more experience and consequently an increased competence level as you move through your apprenticeship.

This has been reflected in the structure of the JIB logbooks, as each one reflects a stage of your JIB apprenticeship, with entries at Stage 1 only requiring you to be aware of situations, whereas entries at Stage 3 require you to be undertaking the work yourself with minimal supervision. Please be aware that the logbooks are arranged so that your assessor can use the evidence you present to make informed judgements about your competence against the NOS standards. It is therefore very important to present each logbook correctly.

Each unit contains JOB DESCRIPTION pages and each job description page then contains various tasks known as PERFORMANCE OBJECTIVES (or POs for short) and each PO must be written about in the relevant box. You will see that sometimes POs have been grouped together to form a single task where it is sensible to do so. For more information see pages 76-78.

The Stage 1 logbook was meant for training purposes only, in that it was there to help you become familiar with the evidence gathering process and logbook completion. Consequently, the Stage 1 logbook contained only one job description per unit and could be based upon activities completed **either** on site **or** in the college/training centre. Each job description was supported by a relevant and job-specific piece of supporting evidence.

The Stage 2 logbook again contained only one entry per unit, based on activities completed in the work place, under supervision, with the employer and each entry was supported by a relevant piece of supporting evidence from the work place concerned.

This Stage 3 logbook contains **three job descriptions per unit** that again **must** be based on activities completed in the work place, with minimal supervision, with your employer. This is because it is important that you demonstrate your competent performance on more than one occasion. It is this performance on more than one occasion that lets an assessor determine whether you can get it right consistently. Again, each job description **must** be supported by a relevant piece of supporting evidence.

Although each stage requires you to demonstrate your ever-increasing level of competence, the concept in completing the logbook job description pages remains the same. That said, it is important to remember that all the POs must be written about on each job description page.

Therefore, before you can start to make any entries in the logbook, you will need to identify what site and job you are going to write about. It often helps if you keep a basic site diary to record what you have done on sites and when, before you start this process.

Ideally, you should choose to write about a job that you did that will allow you to cover all of the evidence requirements of all of the units within a stage.

## Important Notes

- The logbook must be completed in either blue or black ink. Pencil is not permitted. Because of this you may want to write your descriptions out roughly first on an A4 page and then ask your assessor to check them for you.
- Choose the sites and jobs that you intend to write about carefully. A little extra time spent at this stage could save you a lot of heartache and extra effort later on. Remember, ideally you need **three jobs at Stage 3** that will allow you to cover all of the tasks and range of evidence requirements in all of the units.
- When you enter the DATE JOB STARTED and DATE JOB ENDED at the top of each entry page, please note that these represent the time that you were involved in the task that you are writing about, not the duration of the entire site or project. It is acceptable to show this information as month & year (e.g. June 2003); you don't need to give the exact date.
- When you have selected the job(s) that you intend to use for a unit, write a brief description of the work that was carried out in the box marked "*Brief description of job*". This is to give the assessor a "feel" for what you were doing. Consequently it doesn't need to be an essay, just something like ..... "*I was installing extra lights and an extract fan in a secondary school toilet. We also had to adjust heating controls in the boiler house. The school was open when we carried out the work*".
- Remember that if you tick it, then you must write about it.
- When writing your descriptions, be clear and concise about what you did. Don't use slang and remember that you are trying to provide your assessor with enough information to determine your level of competence. Insufficient detail given or the more difficult it is to understand, then the longer the process takes.
- Be careful to cover all of the evidence requirements, i.e. one wiring system, one piece of electrical equipment etc. in each of the units
- You are not allowed to use Tippex or similar correcting fluids. If you make a mistake, simply cross it out and put your initials along side it.
- Please do not tick or otherwise mark the Assessor/IV boxes.
- If you need to continue a description, do so using the continuation page at the back of the logbook. This page should be photocopied as and when you need it, but don't forget to have it signed by your WBR. Once completed, they should be placed behind the job description page of the unit that they relate to.
- Once you have completed all the units in a stage, you need to have the relevant expert witness page signed by an electrically competent member within the management of your company.
- If you are unsure about what is required ..... speak to your assessor.

## Unit 301 Ensure safe electrical site working

This unit is for you if you work on electrotechnical systems and equipment, as you will need to ensure that where you work on site is continually safe for you to do so.

The unit is about assessing the site for hazards prior to, during and on completion of work and is also about ensuring the site is left in a safe and tidy condition upon completion of the work.

You therefore need to show that you possess the skills & knowledge to:

- Assess the working environment at the site for health & safety purposes.
- Plan and agree a safe system of work.
- Carry out safe working practices including the correct use of access equipment.
- Monitor that the site remains continually safe during working and is left in a safe and secure condition on completion.

### What you need to do next:

Look at the “key words and phrases” given below. These explain some words and phrases that have been used in this unit and which will help you understand it more easily.

### KEY WORDS AND PHRASES

Working conditions:	This refers to the working conditions that exist at the point in time when the work activities are due to take place. The working conditions could vary. It could be for example, that the work is to take place outside, in which case you would need to take account of the weather conditions. Or perhaps other (non-electrical) contractors join the site to start their work. Their subsequent activities may cause the site to become hazardous.
Safe system of work:	This refers to a system of work that includes procedures such as safe isolation, permits to work, wearing Personal Protective Equipment (PPE) or other appropriate systems identified via a risk assessment. The system of work may take the form of a method statement.
Access equipment:	These include ladders, steps, trestles, system scaffolds, platforms etc. used to gain access to floors, walls and roof voids.
Relevant people:	This includes the customer, client, charge-hand, other contractors, foreman or supervising electrician, who could be the electrician in charge of the site.
Site:	This refers to the immediate work area or work place.
Electrical systems:	This includes ELV / LV single and multiphase, lighting, power and controls.

### EVIDENCE REQUIREMENTS

*Evidence of competent performance is required from:*

- Handling and use of at least two different types of access equipment, two safe systems of work, dealing with two types of relevant person and two types of working condition (inside and outside).

**UNIT 301 Ensure safe electrical site working****Job Description Page One**

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site							
Date job started				Date job finished			
Brief description of job:							
<b>PO</b>	<b>Tasks that you must complete on each job</b>						<b>Assessor/IV tick</b>
1	I carried out a risk assessment of the worksite to make sure I complied with health & safety regulations and any other relevant legislation. <u>Describe here how you did this:</u>						
Tick	Indoors			Outdoors			
2,4	I planned a safe system of work and agreed it with the relevant person. I then regularly checked that the working conditions on site remained safe to work on. <u>Describe here how you did this:</u>						
Tick	Use of PPE		Safe isolation		Permit to work		Other procedures
	Customer/client		Supervisor		Other contractors		Colleagues
3	How did you prevent any unauthorised entry to the work site ? <u>Describe here how you did this:</u>						

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job				Assessor/IV tick
5	I used and operated all tools, plant and access equipment correctly, safely and according to suppliers' instructions. <u>Describe here how you did this:</u>				
Tick	Ladders /steps		Trestles		
	Systems scaffolding		Platforms		
6	I made sure that all tools, materials, plant and equipment are stored safely and securely during the work activities. <u>Describe here how you did this:</u>				
7	When work ends each day, I checked that all tools, equipment, plant and materials are removed from the site and that everything is left clean, tidy and safe in accordance with all regulations and good practice. <u>Describe here how you did this:</u>				

Apprentice signature		WBR signature		Date	
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## UNIT 301 Ensure safe electrical site working

### Job Description Page Two

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site							
Date job started				Date job finished			
Brief description of job:							
<b>PO</b>	<b>Tasks that you must complete on each job</b>						<b>Assessor/IV tick</b>
1	I carried out a risk assessment of the worksite to make sure I complied with health & safety regulations and any other relevant legislation. <u>Describe here how you did this:</u>						
Tick	Indoors			Outdoors			
2,4	I planned a safe system of work and agreed it with the relevant person. I then regularly checked that the working conditions on site remained safe to work on. <u>Describe here how you did this:</u>						
Tick	Use of PPE		Safe isolation		Permit to work		Other procedures
	Customer/client		Supervisor		Other contractors		Colleagues
3	How did you prevent any unauthorised entry to the work site ? <u>Describe here how you did this:</u>						

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job				Assessor/IV tick
5	I used and operated all tools, plant and access equipment correctly, safely and according to suppliers' instructions. <u>Describe here how you did this:</u>				
Tick	Ladders /steps		Trestles		
	Systems scaffolding		Platforms		
6	I made sure that all tools, materials, plant and equipment are stored safely and securely during the work activities. <u>Describe here how you did this:</u>				
7	When work ends each day, I checked that all tools, equipment, plant and materials are removed from the site and that everything is left clean, tidy and safe in accordance with all regulations and good practice. <u>Describe here how you did this:</u>				

Apprentice signature		WBR signature		Date	
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## UNIT 301 Ensure safe electrical site working

### Job Description Page Three

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site							
Date job started				Date job finished			
Brief description of job:							
<b>PO</b>	<b>Tasks that you must complete on each job</b>						<b>Assessor/IV tick</b>
1	I carried out a risk assessment of the worksite to make sure I complied with health & safety regulations and any other relevant legislation. <u>Describe here how you did this:</u>						
Tick	Indoors			Outdoors			
2,4	I planned a safe system of work and agreed it with the relevant person. I then regularly checked that the working conditions on site remained safe to work on. <u>Describe here how you did this:</u>						
Tick	Use of PPE		Safe isolation		Permit to work		Other procedures
	Customer/client		Supervisor		Other contractors		Colleagues
3	How did you prevent any unauthorised entry to the work site ? <u>Describe here how you did this:</u>						

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job				Assessor/IV tick
5	I used and operated all tools, plant and access equipment correctly, safely and according to suppliers' instructions. <u>Describe here how you did this:</u>				
Tick	Ladders /steps		Trestles		
	Systems scaffolding		Platforms		
6	I made sure that all tools, materials, plant and equipment are stored safely and securely during the work activities. <u>Describe here how you did this:</u>				
7	When work ends each day, I checked that all tools, equipment, plant and materials are removed from the site and that everything is left clean, tidy and safe in accordance with all regulations and good practice. <u>Describe here how you did this:</u>				

Apprentice signature		WBR signature		Date	
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## UNIT 301 SUPPLEMENTARY EVIDENCE REQUIREMENTS

This unit requires 1 piece of supporting evidence for each job description. If the authentication of the evidence is obvious i.e. the document refers directly to the apprentice and site then there is no requirement for the WBR to endorse the evidence. However in **all other instances** the WBR must endorse the document and state that the evidence produced by the apprentice does in fact relate to the job the apprentice is using for evidence. The apprentice must also endorse each individual piece of documentary evidence. The following list highlights the type of evidence that is acceptable for Unit 301.

Put your supplementary evidence in an A4 plastic wallet, place it at the end of each unit and complete the Documentary Evidence Log at the front of this logbook.

Type of evidence
Risk assessments or RIDDOR reports
Access equipment instructions
Extract from company H&S manual
Job/site specific witness testimony
Fully authenticated photographs
Permits to work
Layout drawing of exit routes

## UNIT 301 LOG BOOK CHECKLIST

Please use this checklist to ensure that you have completed this unit correctly.

	Yes	No
Location of job given		
Dates job started and finished are entered correctly on the description page		
Two different working conditions identified (indoors and outdoors)		
Two types of access equipment covered		
Two relevant persons dealt with		
Two safe systems of work covered		
Boxes (P.O.) ticked where appropriate		
One piece of relevant evidence per job description is included		
Apprentice and WBR have signed each job description page.		

**Unit 301 Additional knowledge questions asked, with recorded apprentice response**

As many questions as may be required per unit should be asked to confirm the candidates understanding. Please insert the relevant PO number against each question.

<b>PO No.</b>	<b>Written Question</b> <i>(To be written by assessor)</i>	<b>Candidates response</b> <i>(To be written by assessor)</i>

<b>UNIT 301 ASSESSOR REPORT</b> (Please state the outcome of your assessment. If all the standards are unable to be met, state where the candidate is not yet competent.)		
Date:		
Assessor Signature:		
Assessor Name:		
Date:		

<b>UNIT 301 FEEDBACK GIVEN TO CANDIDATE</b> (Please state the required action to be taken by the candidate)		
Date:		
I confirm that additional knowledge questions were asked and I agree the comments made above.		
Candidate Signature:		
Date:		

## Unit 304 Maintain a healthy and safe working environment

This unit is for those at work. The HASAWA 1974 seeks to secure the health, safety and welfare of people whilst they work and protect other people against risks to health or safety arising from the activity of people at work and this unit is about maintaining a safe working environment.

You therefore need to show that you possess the skills & knowledge to:

- Ensure that your own actions do not create any health & safety risks.
- Not ignore hazards with significant risk in your workplace.
- Take sensible action to put things right.

### What you need to do next:

Look at the “key words and phrases” given below. These explain some words and phrases that have been used in this unit and which will help you understand it more easily.

### KEY WORDS AND PHRASES

Hazard:	Is something with the potential to cause harm.
Risk:	Is the likelihood of a hazard’s potential being realised.
Emergencies:	This includes fire, explosions, toxic atmosphere and electric shock.
Working conditions:	This refers to the working conditions that exist at the point in time when the work activities are due to take place. The working conditions could vary. It could be for example, that the work is to take place outside, in which case you would need to take account of the weather conditions. Or perhaps other (non-electrical) contractors join the site to start their work. Their subsequent activities may cause the site to become hazardous.
Working environment:	This refers to the different types of worksite and includes domestic, industrial, agricultural, commercial, confined spaces or near other machinery. The working environment is something you would not be able to change.
Relevant people:	This includes the client, customer, other contractors, foreman or supervising electrician, who could be the electrician in charge of the site.
Working practices:	This includes activities, procedures, use of materials & equipment and techniques used in carrying out your job.

Please note that the phrase “*the legal responsibilities for health & safety as defined by any specific legislation for your job role*”, is intended to relate to those specific areas of legislation important to your workplace that you should be able to find out about. The HASAWA 1974 is the main piece of legislation under which nearly all other regulations are made. It is for this reason that this piece of legislation is referred to in this unit.

### EVIDENCE REQUIREMENTS

*Evidence of competent performance is required from:*

- Two working practices, two different relevant persons and two different working environments (domestic not permitted).

## UNIT 304 Maintain a healthy and safe working environment

### Job Description One

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site										
Date job started					Date job finished					
Brief description of job:										
<b>PO</b>	<b>Tasks that you must complete on each job</b>						<b>Assessor/IV tick</b>			
1, 2	Before work commenced I identified those workplace health & safety procedures relevant to my working environment. This included evacuation procedures and finding emergency exits. <u>Describe here how you did this:</u>									
Tick	Confined spaces		Agricultural		Industrial		Working near machinery		Commercial	
3	I checked my working practices and working environment for hazards that could cause serious harm. <u>Describe here how you did this:</u>									
Tick	Confined spaces		Agricultural		Industrial		Working near machinery		Commercial	
4	I controlled those hazards that were within my capability and level of responsibility. <u>Describe here how you did this:</u>									

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job						Assessor/IV tick
5	I reported any hazards that may present a high risk to the relevant person responsible for workplace health & safety. <u>Describe here how you did this:</u>						
Tick	Supervisor		Colleague		Foreman	Charge-hand	
6	I made sure that my conduct around the workplace did not endanger the health & safety of myself or anyone else. <u>Describe here how you did this:</u>						
7	I followed all workplace policies and manufacturers/suppliers instructions to safely use any tools, plant and equipment. <u>Describe here how you did this :</u>						
8/9	I followed agreed procedures in the event of an emergency warning or in the event of an injury to myself or anyone else. <u>Describe here how you did this:</u>						

Apprentice signature		WBR signature		Date	
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## UNIT 304 Maintain a healthy and safe working environment

### Job Description Two

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site							
Date job started				Date job finished			
Brief description of job:							
<b>PO</b>	<b>Tasks that you must complete on each job</b>						<b>Assessor/IV tick</b>
1, 2	Before work commenced I identified those workplace health & safety procedures relevant to my working environment. This included evacuation procedures and finding emergency exits. <u>Describe here how you did this:</u>						
Tick	Confined spaces		Agricultural		Industrial	Working near machinery	Commercial
3	I checked my working practices and working environment for hazards that could cause serious harm. <u>Describe here how you did this:</u>						
Tick	Confined spaces		Agricultural		Industrial	Working near machinery	Commercial
4	I controlled those hazards that were within my capability and level of responsibility. <u>Describe here how you did this:</u>						

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job						Assessor/IV tick
5	I reported any hazards that may present a high risk to the relevant person responsible for workplace health & safety. <u>Describe here how you did this:</u>						
Tick	Supervisor		Colleague		Foreman	Charge-hand	
6	I made sure that my conduct around the workplace did not endanger the health & safety of myself or anyone else. <u>Describe here how you did this:</u>						
7	I followed all workplace policies and manufacturers/suppliers instructions to safely use any tools, plant and equipment. <u>Describe here how you did this :</u>						
8/9	I followed agreed procedures in the event of an emergency warning or in the event of an injury to myself or anyone else. <u>Describe here how you did this:</u>						

Apprentice signature		WBR signature		Date	
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## UNIT 304 Maintain a healthy and safe working environment

### Job Description Three

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site							
Date job started				Date job finished			
Brief description of job:							
<b>PO</b>	<b>Tasks that you must complete on each job</b>						<b>Assessor/IV tick</b>
1, 2	Before work commenced I identified those workplace health & safety procedures relevant to my working environment. This included evacuation procedures and finding emergency exits. <u>Describe here how you did this:</u>						
Tick	Confined spaces		Agricultural		Industrial	Working near machinery	Commercial
3	I checked my working practices and working environment for hazards that could cause serious harm. <u>Describe here how you did this:</u>						
Tick	Confined spaces		Agricultural		Industrial	Working near machinery	Commercial
4	I controlled those hazards that were within my capability and level of responsibility. <u>Describe here how you did this:</u>						

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job						Assessor/IV tick
5	I reported any hazards that may present a high risk to the relevant person responsible for workplace health & safety. <u>Describe here how you did this:</u>						
Tick	Supervisor		Colleague		Foreman	Charge-hand	
6	I made sure that my conduct around the workplace did not endanger the health & safety of myself or anyone else. <u>Describe here how you did this:</u>						
7	I followed all workplace policies and manufacturers/suppliers instructions to safely use any tools, plant and equipment. <u>Describe here how you did this :</u>						
8/9	I followed agreed procedures in the event of an emergency warning or in the event of an injury to myself or anyone else. <u>Describe here how you did this:</u>						

Apprentice signature		WBR signature		Date	
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## UNIT 304 SUPPLEMENTARY EVIDENCE REQUIREMENTS

This unit requires 1 piece of supplementary evidence for each job description. If the authentication of the evidence is obvious i.e. the document refers directly to the apprentice and site then there is no requirement for the WBR to endorse the evidence. However in **all other instances** the WBR must endorse the document and state that the evidence produced by the apprentice does in fact relate to the job the apprentice is using for evidence. The apprentice must also endorse each individual piece of documentary evidence. The following list highlights the type of evidence that is acceptable for Unit 304.

Put your supplementary evidence in an A4 plastic wallet, place it at the end of each unit and complete the Documentary Evidence Log at the front of this logbook.

Type of evidence
Health & Safety manual
Construction site Health & Safety procedures
Risk assessment
Site induction certificate/pass
Fully authenticated photographs

## UNIT 304 LOG BOOK CHECKLIST

Please use this checklist to ensure that you have completed this unit correctly.

	Yes	No
Location of job given		
Dates job started and finished are entered correctly		
Two types of relevant person covered		
Two types of working practice covered		
Two types of working environment covered		
Boxes (P.O.) ticked where appropriate		
One piece of relevant evidence per job description		
Apprentice and WBR have signed each job description page.		



<b>UNIT 304 ASSESSOR REPORT</b> (Please state the outcome of your assessment. If all the standards are unable to be met, state where the candidate is not yet competent.)		
Date:		
Assessor Signature:		
Assessor Name:		
Date:		

<b>UNIT 304 FEEDBACK GIVEN TO CANDIDATE</b> (Please state the required action to be taken by the candidate)		
Date:		
I confirm that additional knowledge questions were asked and I agree the comments made above.		
Candidate Signature:		
Date:		

## Unit 305 Prepare to install wiring systems, enclosures and equipment

This unit is for you if you ensure that the necessary wiring systems, enclosures and equipment are appropriate for the installation, prior to the work taking place.

You therefore need to show that you possess the skills & knowledge to:

- Understand the meaning and application of the phrase “fit for purpose”.
- Understand the importance of ensuring that any intended installation meets the expectation of the relevant person.
- Confirm that the wiring systems, enclosures and equipment are suitable for the environment in which they will be installed.

### What you need to do next:

Look at the “key words and phrases” given below. These explain some words and phrases that have been used in this unit and which will help you understand it more easily.

### KEY WORDS AND PHRASES

Wiring systems:	Include single & multi-core cables with PVC, XLPE or LSF insulation & sheathing, MI cable and SWA cable.
Wiring enclosures:	Include PVC and steel conduit, PVC and steel trunking, cable tray, ladder systems and ducting systems.
Electrical equipment:	Includes components and accessories, electrical plant, motors & starters, switchgear & distribution panels, luminaires and control systems & components.
Working environment:	This refers to the different types of worksite and includes domestic, industrial, agricultural, commercial, leisure or confined spaces or near other machinery. The working environment is something you would not be able to change.
Working conditions:	This refers to the working conditions that exist at the point in time when the work activities are due to take place. The working conditions could vary. It could be for example, that the work is to take place outside, in which case you would need to take account of the weather conditions. Or perhaps other (non-electrical) contractors join the site to start their work. Their- subsequent activities may cause the site to become hazardous.
Relevant people:	This includes the client, customer, supervisor, colleagues or other contractors.
Site services:	This includes water, gas, oil, air conditioning, air lines and maintenance vehicles.

### EVIDENCE REQUIREMENTS

*Evidence of competent performance is required from:*

- Two different working conditions (indoors and outdoors), three different wiring systems, three different wiring enclosures and three different types of electrical equipment.

## UNIT 305 Prepare to install wiring systems, enclosures and equipment

### Job Description One

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site								
Date job started					Date job finished			
Brief description of job:								
<b>PO</b>	<b>Tasks that you must complete on each job</b>						<b>Assessor/IV tick</b>	
1,2	Before starting any work, I confirmed all my installation plans with and obtained permission to start work from, the relevant person. <u>Describe here how you did this:</u>							
Tick	Client/customer		Supervisor		Other contractor		Colleague	
	Indoors		Outdoors					
6	Before starting work, I checked with the relevant person that the building fabric was free from any risks to health & safety (eg. asbestos). <u>Describe here how you did this:</u>							
3	I confirmed that I had sufficient wiring systems, enclosures and equipment of the correct size and type to do the job. <u>Describe here how you did this:</u>							

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job				Assessor/IV tick
4, 5	I checked that the wiring systems, enclosures & equipment were in good condition, appropriate for the installation (ie fit for purpose) and compatible with all other site services. <u>Describe here how you did this:</u>				
Tick	PVC single/multi-core cable	MI cable	SWA cable	Cable tray	
	PVC/steel conduit	PVC/steel trunking		Ladder systems	
	Ducting systems	Components & accessories		Motors & starters	
	Switchgear & distribution	Control systems & components			
7	I used the correct fixings appropriate to the site structure & building fabric. <u>Describe here how you did this:</u>				
8	I followed all appropriate manufacturers instructions for wiring systems, enclosures or equipment. <u>Describe here how you did this:</u>				

Apprentice signature		WBR signature		Date	
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## UNIT 305 Prepare to install wiring systems, enclosures and equipment

### Job Description Two

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site									
Date job started					Date job finished				
Brief description of job:									
<b>PO</b>	<b>Tasks that you must complete on each job</b>						<b>Assessor/IV tick</b>		
1,2	Before starting any work, I confirmed all my installation plans with and obtained permission to start work from, the relevant person. <u>Describe here how you did this:</u>								
Tick	Client/customer		Supervisor		Other contractor			Colleague	
	Indoors		Outdoors						
6	Before starting work, I checked with the relevant person that the building fabric was free from any risks to health & safety (eg. asbestos). <u>Describe here how you did this:</u>								
3	I confirmed that I had sufficient wiring systems, enclosures and equipment of the correct size and type to do the job. <u>Describe here how you did this:</u>								

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job				Assessor/IV tick
4, 5	I checked that the wiring systems, enclosures & equipment were in good condition, appropriate for the installation (ie fit for purpose) and compatible with all other site services. <u>Describe here how you did this:</u>				
Tick	PVC single/multi-core cable	MI cable	SWA cable	Cable tray	
	PVC/steel conduit	PVC/steel trunking		Ladder systems	
	Ducting systems	Components & accessories		Motors & starters	
	Switchgear & distribution	Control systems & components			
7	I used the correct fixings appropriate to the site structure & building fabric. <u>Describe here how you did this:</u>				
8	I followed all appropriate manufacturers instructions for wiring systems, enclosures or equipment. <u>Describe here how you did this:</u>				

Apprentice signature		WBR signature		Date	
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## UNIT 305 Prepare to install wiring systems, enclosures and equipment

### Job Description Three

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site									
Date job started					Date job finished				
Brief description of job:									
<b>PO</b>	<b>Tasks that you must complete on each job</b>						<b>Assessor/IV tick</b>		
1,2	Before starting any work, I confirmed all my installation plans with and obtained permission to start work from, the relevant person. <u>Describe here how you did this:</u>								
Tick	Client/customer		Supervisor		Other contractor			Colleague	
	Indoors		Outdoors						
6	Before starting work, I checked with the relevant person that the building fabric was free from any risks to health & safety (eg. asbestos). <u>Describe here how you did this:</u>								
3	I confirmed that I had sufficient wiring systems, enclosures and equipment of the correct size and type to do the job. <u>Describe here how you did this:</u>								

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job				Assessor/IV tick
4, 5	I checked that the wiring systems, enclosures & equipment were in good condition, appropriate for the installation (ie fit for purpose) and compatible with all other site services. <u>Describe here how you did this:</u>				
Tick	PVC single/multi-core cable	MI cable	SWA cable	Cable tray	
	PVC/steel conduit	PVC/steel trunking		Ladder systems	
	Ducting systems	Components & accessories		Motors & starters	
	Switchgear & distribution	Control systems & components			
7	I used the correct fixings appropriate to the site structure & building fabric. <u>Describe here how you did this:</u>				
8	I followed all appropriate manufacturers instructions for wiring systems, enclosures or equipment. <u>Describe here how you did this:</u>				

Apprentice signature		WBR signature		Date	
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## UNIT 305 SUPPLEMENTARY EVIDENCE REQUIREMENTS

This unit requires 1 piece of supplementary evidence for each job description. If the authentication of the evidence is obvious i.e. the document refers directly to the apprentice and site then there is no requirement for the WBR to endorse the evidence. However in **all other instances** the WBR must endorse the document and state that the evidence produced by the apprentice does in fact relate to the job the apprentice is using for evidence. The apprentice must also endorse each individual piece of documentary evidence. The following list highlights the type of evidence that is acceptable for Unit 305.

Put your supplementary evidence in an A4 plastic wallet, place it at the end of each unit and complete the Documentary Evidence Log at the front of this logbook.

Type of evidence
Installation drawings
Extracts from the installation specification
Material requisition sheets (must be job specific)
Delivery notes (must be job specific)
Fully authenticated photographs

## UNIT 305 LOG BOOK CHECKLIST

Please use this checklist to ensure that you have completed this unit correctly.

	Yes	No
Location of job given		
Dates job started and finished are entered correctly		
Three types of wiring system covered		
Three types of wiring enclosure covered		
Three types of electrical equipment covered		
Two types of working condition covered (indoor and outdoor)		
Boxes (P.O.) ticked where appropriate		
One piece of relevant evidence per job description		
Apprentice and WBR have signed each job description page.		



<b>UNIT 305 ASSESSOR REPORT</b> (Please state the outcome of your assessment. If all the standards are unable to be met, state where the candidate is not yet competent.)		
Date:		
Assessor Signature:		
Assessor Name:		
Date:		

<b>UNIT 305 FEEDBACK GIVEN TO CANDIDATE</b> (Please state the required action to be taken by the candidate)		
Date:		
I confirm that additional knowledge questions were asked and I agree the comments made above.		
Candidate Signature:		
Date:		

<b>Unit 306    Install electrical wiring systems, enclosures and equipment</b>
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This unit is for you if you carry out the installation of electrical wiring systems, enclosures and equipment by following correct procedures

You therefore need to show that you possess the skills & knowledge to:

- Install wiring systems, enclosures and equipment.
- Identify and safely isolate electrical supplies.
- Position and fix components correctly.
- Identify those areas having the potential to be hazardous.

**What you need to do next:**

Look at the “key words and phrases” given below. These explain some words and phrases that have been used in this unit and which will help you understand it more easily.

**KEY WORDS AND PHRASES**

Wiring systems:	Include single & multi-core cables with PVC, XLPE or LSF insulation & sheathing, MI cable and SWA cable.
Wiring enclosures:	Include PVC and steel conduit, PVC and steel trunking, cable tray, ladder systems and ducting systems.
Electrical equipment:	Includes components and accessories, electrical plant, motors & starters, switchgear & distribution panels, luminaires and control systems & components.
Means of isolation:	An isolating item or component that is located in an accessible position and is suitable to the nature of the equipment and the circumstances under which isolation may be required.
Electrical systems:	This includes ELV / LV single and multi-phase including lighting, power and controls.
Relevant people:	This includes the client, customer, supervisor, colleagues or other contractors.
Site services:	This includes water, gas, oil, air conditioning, air lines and maintenance vehicles.

**EVIDENCE REQUIREMENTS**

*Evidence of competent performance is required from:*

- Three types of electrical system, three types of wiring system, three types of wiring enclosure and three types of electrical equipment.

## UNIT 306 Install electrical wiring systems, enclosures and equipment

### Job Description One

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site							
Date job started				Date job finished			
Brief description of job:							
PO	Tasks that you must complete on each job						Assessor/IV tick
2, 6	I followed procedures to make sure the installation would be co-ordinated with the site services and activities of the other trades. <u>Describe here how you did this:</u>						
1	I checked that the existing electrical supply was suitable for use with our installation. <u>Describe here how you did this:</u>						
Tick	ELV		LV	Lighting		Power	Controls
3, 4	Before starting work, I identified the means of isolation and carried out a safe isolation procedure using approved methods to the electrical regulations. <u>Describe here how you did this:</u>						
5, 6	I measured & marked out the locations for the wiring systems, enclosures and equipment in accordance with regulations and site specifications, making sure that all locations are sensible and visually acceptable. <u>Describe here how you did this:</u>						

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job							Assessor/IV tick
7	I positioned & fixed the wiring systems, enclosures and equipment safely & in accordance with regulations, manufacturers instructions and site specifications. <u>Describe here how you did this:</u>							
Tick	PVC single/multi-core cable		MI cable		SWA cable		Cable tray	
	PVC/steel conduit		PVC/steel trunking				Ladder systems	
	Ducting systems		Components & accessories				Motors & starters	
	Switchgear & distribution		Control systems & components					
8, 9	I reported and sought action from the relevant person regarding any variation to the work programme that had the potential to be dangerous or which could have an impact on cost. <u>Describe here how you did this:</u>							
Tick	Supervisor		Colleague		Foreman		Charge-hand	

Apprentice signature		WBR signature		Date	
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## UNIT 306 Install electrical wiring systems, enclosures and equipment

### Job Description Two

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site							
Date job started				Date job finished			
Brief description of job:							
<b>PO</b>	<b>Tasks that you must complete on each job</b>						<b>Assessor/IV tick</b>
2, 6	I followed procedures to make sure the installation would be co-ordinated with the site services and activities of the other trades. <u>Describe here how you did this:</u>						
1	I checked that the existing electrical supply was suitable for use with our installation. <u>Describe here how you did this:</u>						
Tick	ELV		LV	Lighting		Power	Controls
3, 4	Before starting work, I identified the means of isolation and carried out a safe isolation procedure using approved methods to the electrical regulations. <u>Describe here how you did this:</u>						
5, 6	I measured & marked out the locations for the wiring systems, enclosures and equipment in accordance with regulations and site specifications, making sure that all locations are sensible and visually acceptable. <u>Describe here how you did this:</u>						

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job							Assessor/IV tick
7	I positioned & fixed the wiring systems, enclosures and equipment safely & in accordance with regulations, manufacturers instructions and site specifications. <u>Describe here how you did this:</u>							
Tick	PVC single/multi-core cable		MI cable		SWA cable		Cable tray	
	PVC/steel conduit		PVC/steel trunking				Ladder systems	
	Ducting systems		Components & accessories				Motors & starters	
	Switchgear & distribution		Control systems & components					
8, 9	I reported and sought action from the relevant person regarding any variation to the work programme that had the potential to be dangerous or which could have an impact on cost. <u>Describe here how you did this:</u>							
Tick	Supervisor		Colleague		Foreman		Charge-hand	

Apprentice signature		WBR signature		Date	
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## UNIT 306 Install electrical wiring systems, enclosures and equipment

### Job Description Three

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site							
Date job started		Date job finished					
Brief description of job:							
PO	Tasks that you must complete on each job						Assessor/IV tick
2, 6	I followed procedures to make sure the installation would be co-ordinated with the site services and activities of the other trades. <u>Describe here how you did this:</u>						
1	I checked that the existing electrical supply was suitable for use with our installation. <u>Describe here how you did this:</u>						
Tick	ELV		LV	Lighting		Power	Controls
3, 4	Before starting work, I identified the means of isolation and carried out a safe isolation procedure using approved methods to the electrical regulations. <u>Describe here how you did this:</u>						
5, 6	I measured & marked out the locations for the wiring systems, enclosures and equipment in accordance with regulations and site specifications, making sure that all locations are sensible and visually acceptable. <u>Describe here how you did this:</u>						

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job							Assessor/IV tick
7	I positioned & fixed the wiring systems, enclosures and equipment safely & in accordance with regulations, manufacturers instructions and site specifications. <u>Describe here how you did this:</u>							
Tick	PVC single/multi-core cable		MI cable		SWA cable		Cable tray	
	PVC/steel conduit		PVC/steel trunking				Ladder systems	
	Ducting systems		Components & accessories				Motors & starters	
	Switchgear & distribution		Control systems & components					
8, 9	I reported and sought action from the relevant person regarding any variation to the work programme that had the potential to be dangerous or which could have an impact on cost. <u>Describe here how you did this:</u>							
Tick	Supervisor		Colleague		Foreman		Charge-hand	

Apprentice signature		WBR signature		Date	
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UNIT 306 SUPPLEMENTARY EVIDENCE REQUIREMENTS	
<p>This unit requires 1 piece of supplementary evidence for each job description. If the authentication of the evidence is obvious i.e. the document refers directly to the apprentice and site then there is no requirement for the WBR to endorse the evidence. However in <b>all other instances</b> the WBR must endorse the document and state that the evidence produced by the apprentice does in fact relate to the job the apprentice is using for evidence. The apprentice must also endorse each individual piece of documentary evidence. The following list highlights the type of evidence that is acceptable for Unit 306.</p> <p>Put your supplementary evidence in an A4 plastic wallet, place it behind each unit and complete the Documentary Evidence Log at the front of this logbook.</p>	
Type of evidence	
Installation drawings	
Extracts from the installation specification	
Material requisition sheets (must be job specific)	
Delivery notes (must be job specific)	
Fully authenticated photographs	

UNIT 306 LOG BOOK CHECKLIST		
Please use this checklist to ensure that you have completed this unit correctly.		
	Yes	No
Location of job given		
Dates job started and finished are entered correctly		
Three types of wiring system covered		
Three types of wiring enclosure covered		
Three types of electrical equipment covered		
Three types of electrical system covered		
Boxes (P.O.) ticked where appropriate		
One piece of relevant evidence per job description		
Apprentice and WBR have signed each job description page.		



<b>UNIT 306 ASSESSOR REPORT</b> (Please state the outcome of your assessment. If all the standards are unable to be met, state where the candidate is not yet competent.)		
Date:		
Assessor Signature:		
Assessor Name:		
Date:		

<b>UNIT 306 FEEDBACK GIVEN TO CANDIDATE</b> (Please state the required action to be taken by the candidate)		
Date:		
I confirm that additional knowledge questions were asked and I agree the comments made above.		
Candidate Signature:		
Date:		

## Unit 307 Connect wiring systems and equipment using safe & approved methods

This unit is for you if you are required to connect wiring systems and equipment by following correct procedures

You therefore need to show that you possess the skills & knowledge to:

- Connect wiring systems and equipment.
- Check connections using safe methods

### What you need to do next:

Look at the “key words and phrases” given below. These explain some words and phrases that have been used in this unit and which will help you understand it more easily.

### KEY WORDS AND PHRASES

**Wiring systems:** Include single & multi-core cables with PVC, XLPE or LSF insulation & sheathing, MI cable and SWA cable.

**Electrical equipment:** Includes components and accessories, electrical plant, motors & starters, switchgear & distribution panels, luminaires and control systems & components.

**Means of isolation:** An isolating item or component that is located in an accessible position and is suitable to the nature of the equipment and the circumstances under which isolation may be required.

**Connections:** The connection of any item of electrical equipment, ensuring that every joint and connection is mechanically & electrically suitable and prevents danger.

**An assessment of safe working practices:** This includes the use of permits to work, where the permit covers work that can only be carried out when normal practices are no longer available.

### EVIDENCE REQUIREMENTS

*Evidence of competent performance is required from:*

- Three types of wiring system and three types of electrical equipment.

## UNIT 307 Connect electrical wiring systems and equipment

### Job Description One

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name and location of site							
Date job started				Date job finished			
Brief description of job							
PO	Tasks that you must complete on each job						Assessor/IV tick
1	I worked within a safe system of work having identified any hazards that could occur when connecting wiring systems and equipment. <u>Describe here how you did this:</u>						
2, 3	Before connecting anything, I identified the means of isolation and carried out a safe isolation procedure using approved methods to the electrical regulations. <u>Describe here how you did this:</u>						
4, 5	I connected wiring and equipment in accordance with the specification and IEE wiring Regulations, making sure that connections were electrically & mechanically sound and identified correctly and clearly. <u>Describe here how you did this:</u>						
Tick	PVC single/multi-core cable		MI cable	SWA	Other		
	Luminaires	Components & accessories	Motors & starters	Switchgear & distribution	Controls		

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job	Assessor/IV tick
6	I checked that all connections made were suitable and correct and where necessary remedied any defects without danger. <u>Describe here how you did this:</u>	
7	I completed any <u>documentation relating to this job</u> legibly, accurately and timely in accordance with requirements. <u>Describe here how you did this:</u>	

Apprentice signature		WBR signature		Date	
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## UNIT 307 Connect electrical wiring systems and equipment

### Job Description Two

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name and location of site							
Date job started				Date job finished			
Brief description of job							
PO	Tasks that you must complete on each job						Assessor/IV tick
1	I worked within a safe system of work having identified any hazards that could occur when connecting wiring systems and equipment. <u>Describe here how you did this:</u>						
2, 3	Before connecting anything, I identified the means of isolation and carried out a safe isolation procedure using approved methods to the electrical regulations. <u>Describe here how you did this:</u>						
4, 5	I connected wiring and equipment in accordance with the specification and IEE wiring Regulations, making sure that connections were electrically & mechanically sound and identified correctly and clearly. <u>Describe here how you did this:</u>						
Tick	PVC single/multi-core cable		MI cable	SWA	Other		
	Luminaires	Components & accessories	Motors & starters	Switchgear & distribution	Controls		

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job	Assessor/IV tick
6	I checked that all connections made were suitable and correct and where necessary remedied any defects without danger. <u>Describe here how you did this:</u>	
7	I completed any <u>documentation relating to this job</u> legibly, accurately and timely in accordance with requirements. <u>Describe here how you did this:</u>	

Apprentice signature		WBR signature		Date	
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## UNIT 307 Connect electrical wiring systems and equipment

### Job Description Three

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name and location of site							
Date job started				Date job finished			
Brief description of job							
PO	Tasks that you must complete on each job						Assessor/IV tick
1	I worked within a safe system of work having identified any hazards that could occur when connecting wiring systems and equipment. <u>Describe here how you did this:</u>						
2, 3	Before connecting anything, I identified the means of isolation and carried out a safe isolation procedure using approved methods to the electrical regulations. <u>Describe here how you did this:</u>						
4, 5	I connected wiring and equipment in accordance with the specification and IEE wiring Regulations, making sure that connections were electrically & mechanically sound and identified correctly and clearly. <u>Describe here how you did this:</u>						
Tick	PVC single/multi-core cable		MI cable	SWA	Other		
	Luminaires	Components & accessories	Motors & starters	Switchgear & distribution	Controls		

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job	Assessor/IV tick
6	I checked that all connections made were suitable and correct and where necessary remedied any defects without danger. <u>Describe here how you did this:</u>	
7	I completed any <u>documentation relating to this job</u> legibly, accurately and timely in accordance with requirements. <u>Describe here how you did this:</u>	

Apprentice signature		WBR signature		Date	
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## UNIT 307 SUPPLEMENTARY EVIDENCE REQUIREMENTS

This unit requires 1 piece of supplementary evidence for each job description. If the authentication of the evidence is obvious i.e. the document refers directly to the apprentice and site then there is no requirement for the WBR to endorse the evidence. However in **all other instances** the WBR must endorse the document and state that the evidence produced by the apprentice does in fact relate to the job the apprentice is using for evidence. The apprentice must also endorse each individual piece of documentary evidence. The following list highlights the type of evidence that is acceptable for Unit 307.

Put your supplementary evidence in an A4 plastic wallet, place it behind each unit and complete the Documentary Evidence Log at the front of this logbook.

Type of evidence
Installation drawings
Extracts from the installation specification
Distribution / circuit charts
Day work sheets (must be job specific)
Fully authenticated photographs

## UNIT 307 LOG BOOK CHECKLIST

Please use this checklist to ensure that you have completed this unit correctly.

	Yes	No
Location of job given		
Dates job started and finished are entered correctly		
Three types of wiring system covered		
Three types of electrical equipment covered		
Boxes (P.O.) ticked where appropriate		
One piece of relevant evidence per job description		
Apprentice and WBR have signed each job description page.		

<b>Unit 307 Additional knowledge questions asked, with recorded apprentice response</b>		
As many questions as may be required per unit should be asked to confirm the candidates understanding. Please insert the relevant PO number against each question.		
<b>PO No.</b>	<b>Written Question</b> <i>(To be written by assessor)</i>	<b>Candidates response</b> <i>(To be written by assessor)</i>

<b>UNIT 307 ASSESSOR REPORT</b> (Please state the outcome of your assessment. If all the standards are unable to be met, state where the candidate is not yet competent.)		
Date:		
Assessor Signature:		
Assessor Name:		
Date:		

<b>UNIT 307 FEEDBACK GIVEN TO CANDIDATE</b> (Please state the required action to be taken by the candidate)		
Date:		
I confirm that additional knowledge questions were asked and I agree the comments made above.		
Candidate Signature:		
Date:		

## Unit 308 Inspect, test and commission an electrical installation

This unit is for you if you are required to inspect, test and commission an electrical installation by following correct procedures

You therefore need to show that you possess the skills & knowledge to:

- Commission an installation, bearing in mind constraints imposed by legislation and regulations.
- Select and use the appropriate test equipment.
- Keep good records of test procedures and results.

### What you need to do next:

Look at the “key words and phrases” given below. These explain some words and phrases that have been used in this unit and which will help you understand it more easily.

### KEY WORDS AND PHRASES

Relevant people:	These include customers, clients, supervisors, other contractors and colleagues.
Means of isolation:	An isolating item or component that is located in an accessible position and is suitable to the nature of the equipment and the circumstances under which isolation may be required.
An assessment of safe working practices:	This can include the use of permits to work, where the permit covers work that can only be carried out when normal practices are no longer available.
Tests:	This includes tests appropriate to conductors, insulation resistance, polarity, operation of RCDs and earth fault loop impedance.

### EVIDENCE REQUIREMENTS

*Evidence of competent performance is required from:*

- Two types of relevant person and all tests covered.

**UNIT 308 Inspect, test and commission an electrical installation****Job Description One**

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name and location of site					
Date job started				Date job finished	
Brief description of job					
<b>PO</b>	<b>Tasks that you must complete on each job</b>				<b>Assessor/IV tick</b>
1, 2	I planned the inspection and testing process with the relevant people, having firstly carried out an assessment of safe working practices. <u>Describe here how you did this:</u>				
Tick	Customers/clients		Other contractors	Supervisor	Colleagues
3	Before starting to inspect, test and commission, I identified the means of isolation and carried out a safe isolation procedure using approved methods to the electrical regulations. <u>Describe here how you did this:</u>				
4	Before starting work, I checked that the test instruments used on the job were appropriate for the type of test used and in calibration. <u>Describe here how you did this:</u>				

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job						Assessor/IV tick
5, 6	I carried out the inspection and required tests in accordance with manufacturers instructions, installation specifications and the IEE wiring regulations. <u>Describe here how you did this:</u>						
Tick	Continuity of CPC		Continuity of RFC		Insulation resistance		
	Earth fault loop impedance		Operation of RCDs		Polarity		
7, 8	I confirmed that the installation was in accordance with manufacturers instructions and the IEE wiring regulations, before preparing a completed test results sheet appropriate to the installation in accordance with IEE regulations. <u>Describe here how you did this:</u>						
9	I handed the installation over to the relevant person, making sure that they had sufficient information/documentation to safely operate the installation. <u>Describe here how you did this:</u>						

Apprentice signature		WBR signature		Date	
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**UNIT 308 Inspect, test and commission an electrical installation****Job Description Two**

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name and location of site					
Date job started				Date job finished	
Brief description of job					
<b>PO</b>	<b>Tasks that you must complete on each job</b>				<b>Assessor/IV tick</b>
1, 2	I planned the inspection and testing process with the relevant people, having firstly carried out an assessment of safe working practices. <u>Describe here how you did this:</u>				
Tick	Customers/clients		Other contractors	Supervisor	Colleagues
3	Before starting to inspect, test and commission, I identified the means of isolation and carried out a safe isolation procedure using approved methods to the electrical regulations. <u>Describe here how you did this:</u>				
4	Before starting work, I checked that the test instruments used on the job were appropriate for the type of test used and in calibration. <u>Describe here how you did this:</u>				

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job						Assessor/IV tick
5, 6	I carried out the inspection and required tests in accordance with manufacturers instructions, installation specifications and the IEE wiring regulations. <u>Describe here how you did this:</u>						
Tick	Continuity of CPC		Continuity of RFC		Insulation resistance		
	Earth fault loop impedance		Operation of RCDs		Polarity		
7, 8	I confirmed that the installation was in accordance with manufacturers instructions and the IEE wiring regulations, before preparing a completed test results sheet appropriate to the installation in accordance with IEE regulations. <u>Describe here how you did this:</u>						
9	I handed the installation over to the relevant person, making sure that they had sufficient information/documentation to safely operate the installation. <u>Describe here how you did this:</u>						

Apprentice signature		WBR signature		Date	
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## UNIT 308 Inspect, test and commission an electrical installation

### Job Description Three

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name and location of site					
Date job started				Date job finished	
Brief description of job					
<b>PO</b>	<b>Tasks that you must complete on each job</b>				<b>Assessor/IV tick</b>
1, 2	I planned the inspection and testing process with the relevant people, having firstly carried out an assessment of safe working practices. <u>Describe here how you did this:</u>				
Tick	Customers/clients		Other contractors	Supervisor	
3	Before starting to inspect, test and commission, I identified the means of isolation and carried out a safe isolation procedure using approved methods to the electrical regulations. <u>Describe here how you did this:</u>				
4	Before starting work, I checked that the test instruments used on the job were appropriate for the type of test used and in calibration. <u>Describe here how you did this:</u>				

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job						Assessor/IV tick
5, 6	I carried out the inspection and required tests in accordance with manufacturers instructions, installation specifications and the IEE wiring regulations. <u>Describe here how you did this:</u>						
Tick	Continuity of CPC		Continuity of RFC		Insulation resistance		
	Earth fault loop impedance		Operation of RCDs		Polarity		
7, 8	I confirmed that the installation was in accordance with manufacturers instructions and the IEE wiring regulations, before preparing a completed test results sheet appropriate to the installation in accordance with IEE regulations. <u>Describe here how you did this:</u>						
9	I handed the installation over to the relevant person, making sure that they had sufficient information/documentation to safely operate the installation. <u>Describe here how you did this:</u>						

Apprentice signature		WBR signature		Date	
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**UNIT 308****SUPPLEMENTARY EVIDENCE REQUIREMENTS**

This unit requires 1 piece of supplementary evidence for each job description. If the authentication of the evidence is obvious i.e. the document refers directly to the apprentice and site then there is no requirement for the WBR to endorse the evidence. However in **all other instances** the WBR must endorse the document and state that the evidence produced by the apprentice does in fact relate to the job the apprentice is using for evidence. The apprentice must also endorse each individual piece of documentary evidence. The following list highlights the type of evidence that is acceptable for Unit 308.

Put your supplementary evidence in an A4 plastic wallet, place it behind each unit and complete the Documentary Evidence Log at the front of this logbook.

Type of evidence
Visual inspection sheets
Test results sheet (must be job specific)
Electrical installation inspection and test report (must be job specific)
Day work sheets (must be job specific)
Fully authenticated photographs

**UNIT 308 LOG BOOK CHECKLIST**

Please use this checklist to ensure that you have completed this unit correctly.

	Yes	No
Location of job given		
Dates job started and finished are entered correctly		
Two types of relevant person covered		
All types of electrical test covered		
Boxes (P.O.) ticked where appropriate		
One piece of relevant evidence per job description		
Apprentice and WBR have signed each job description page.		



<b>UNIT 308 ASSESSOR REPORT</b> (Please state the outcome of your assessment. If all the standards are unable to be met, state where the candidate is not yet competent.)		
Date:		
Assessor Signature:		
Assessor Name:		
Date:		

<b>UNIT 308 FEEDBACK GIVEN TO CANDIDATE</b> (Please state the required action to be taken by the candidate)		
Date:		
I confirm that additional knowledge questions were asked and I agree the comments made above.		
Candidate Signature:		
Date:		

## Unit 302 Diagnose and correct faults in electrotechnical systems & equipment

This unit is for you if you diagnose and correct faults in electrotechnical systems and equipment and the unit is about identifying and then correcting the faults using safe and approved methods.

You therefore need to show that you possess the skills & knowledge to:

- Follow correct procedures in identifying the fault location.
- Follow and carry out safe and secure isolation procedures.
- Diagnose the faults.
- Correct the faults.
- Use test equipment and tools correctly.

### What you need to do next:

Look at the “key words and phrases” given below. These explain some words and phrases that have been used in this unit and which will help you understand it more easily.

### KEY WORDS AND PHRASES

Relevant people:	This includes the customer, client, client representative, team-leader, charge-hand, other contractors, foreman or supervising electrician, colleagues, non-electrotechnical operatives or those working on machinery affected by your work.
Safe system of work:	This refers to a system of work including procedures such as safe isolation, permit to work, wearing of PPE & other procedures identified as a result of carrying out a risk assessment.
Industry standards:	May be British, European or International.
Electrical systems:	This includes ELV / LV single and multi-phase power, controls and lighting.
Electrical equipment:	This includes electrical plant, components & accessories, motors & starters, switchgear & distribution panels, luminaires and control systems & components.
Connections:	This includes the termination & connection of wiring systems to electrical systems & equipment, ensuring that any joint and connection is both electrically & mechanically sound and fit for use.
Faults:	This can include faults such as overload, earth leakage, open circuits, short circuits, high resistance joints, incomplete circuits and over sensitive/non – performing protective devices.

### EVIDENCE REQUIREMENTS

*Evidence of competent performance is required from:*

Three types of electrical fault, three types of electrical system, three types of electrical equipment and two safe systems of work.

## UNIT 302 Diagnose and correct faults in electrotechnical systems & equipment

### Job Description One

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site									
Date job started						Date job finished			
Brief description of job:									
<b>PO</b>	<b>Tasks that you must complete on each job</b>								<b>Assessor/IV tick</b>
1	Before starting work, I obtained clear & detailed information about the possible faults, including the system specification relating to the electrical systems & equipment. <u>Describe here how you did this:</u>								
Tick	ELV		LV		Lighting		Power		Controls
	Luminaires		Switchgear & distribution		Motors & starters		Components & accessories		Controls & equipment
2	I advised the relevant persons clearly and accurately about the possible disruption & consequences when fault finding and then correcting faults. <u>Describe here how you did this:</u>								
4	I carried out a risk assessment, established safe working practices and then safely performed suitable tests on the installed systems and equipment to identify the reported faults. <u>Describe here how you did this:</u>								
Tick	Safe isolation		Permit to work		PPE		Method statement		

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job						Assessor/IV tick	
5	I followed the correct procedures for carrying out a safe & secure isolation before finding the fault. <u>Describe here how you did this:</u>							
Tick	Overload		Earth leakage		Open circuit		Short circuit	
	High res. joint		Sensitive RCD		Incomplete ring			
3	I agreed the appropriate repairs & their implications with the relevant persons, in accordance with any organisational requirements <u>Describe here how you did this:</u>							
Tick	Client/customer		Supervisor		Other contractors			
5, 6	I rectified the fault by following correct procedures, including the use of any appropriate tools, equipment and materials. <u>Describe here how you did this:</u>							
7	When faults could not be corrected immediately, I left the installed systems & equipment in a safe condition in accordance with industry regulations. <u>Describe here how you did this:</u>							
8,9	I inspected and tested that the repaired installation was functioning correctly and was in accordance with the relevant industry standards and specifications. I then completed any required documentation, accurately and clearly and informed the relevant persons of the outcome. <u>Describe here how you did this:</u>							

Apprentice signature		WBR signature		Date	
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## UNIT 302 Diagnose and correct faults in electrotechnical systems & equipment

### Job Description Two

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site											
Date job started						Date job finished					
Brief description of job:											
<b>PO</b>	<b>Tasks that you must complete on each job</b>										<b>Assessor/IV tick</b>
1	Before starting work, I obtained clear & detailed information about the possible faults, including the system specification relating to the electrical systems & equipment. <u>Describe here how you did this:</u>										
Tick	ELV		LV		Lighting		Power		Controls		
	Luminaires		Switchgear & distribution		Motors & starters		Components & accessories		Controls & equipment		
2	I advised the relevant persons clearly and accurately about the possible disruption & consequences when fault finding and then correcting faults. <u>Describe here how you did this:</u>										
4	I carried out a risk assessment, established safe working practices and then safely performed suitable tests on the installed systems and equipment to identify the reported faults. <u>Describe here how you did this:</u>										
Tick	Safe isolation		Permit to work		PPE		Method statement				

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job						Assessor/IV tick	
5	I followed the correct procedures for carrying out a safe & secure isolation before finding the fault. <u>Describe here how you did this:</u>							
Tick	Overload		Earth leakage		Open circuit		Short circuit	
	High res. joint		Sensitive RCD		Incomplete ring			
3	I agreed the appropriate repairs & their implications with the relevant persons, in accordance with any organisational requirements <u>Describe here how you did this:</u>							
Tick	Client/customer		Supervisor		Other contractors			
5, 6	I rectified the fault by following correct procedures, including the use of any appropriate tools, equipment and materials. <u>Describe here how you did this:</u>							
7	When faults could not be corrected immediately, I left the installed systems & equipment in a safe condition in accordance with industry regulations. <u>Describe here how you did this:</u>							
8,9	I inspected and tested that the repaired installation was functioning correctly and was in accordance with the relevant industry standards and specifications. I then completed any required documentation, accurately and clearly and informed the relevant persons of the outcome. <u>Describe here how you did this:</u>							

Apprentice signature		WBR signature		Date	
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## UNIT 302 Diagnose and correct faults in electrotechnical systems & equipment

### Job Description Three

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site											
Date job started							Date job finished				
Brief description of job:											
<b>PO</b>	<b>Tasks that you must complete on each job</b>										<b>Assessor/IV tick</b>
1	Before starting work, I obtained clear & detailed information about the possible faults, including the system specification relating to the electrical systems & equipment. <u>Describe here how you did this:</u>										
Tick	ELV		LV		Lighting		Power		Controls		
	Luminaires		Switchgear & distribution		Motors & starters		Components & accessories		Controls & equipment		
2	I advised the relevant persons clearly and accurately about the possible disruption & consequences when fault finding and then correcting faults. <u>Describe here how you did this:</u>										
4	I carried out a risk assessment, established safe working practices and then safely performed suitable tests on the installed systems and equipment to identify the reported faults. <u>Describe here how you did this:</u>										
Tick	Safe isolation		Permit to work		PPE		Method statement				

Apprentice signature		WBR signature		Date	
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PO	Tasks that you must complete on each job						Assessor/IV tick	
5	I followed the correct procedures for carrying out a safe & secure isolation before finding the fault. <u>Describe here how you did this:</u>							
Tick	Overload		Earth leakage		Open circuit		Short circuit	
	High res. joint		Sensitive RCD		Incomplete ring			
3	I agreed the appropriate repairs & their implications with the relevant persons, in accordance with any organisational requirements <u>Describe here how you did this:</u>							
Tick	Client/customer		Supervisor		Other contractors			
5, 6	I rectified the fault by following correct procedures, including the use of any appropriate tools, equipment and materials. <u>Describe here how you did this:</u>							
7	When faults could not be corrected immediately, I left the installed systems & equipment in a safe condition in accordance with industry regulations. <u>Describe here how you did this:</u>							
8,9	I inspected and tested that the repaired installation was functioning correctly and was in accordance with the relevant industry standards and specifications. I then completed any required documentation, accurately and clearly and informed the relevant persons of the outcome. <u>Describe here how you did this:</u>							

Apprentice signature		WBR signature		Date	
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UNIT 302	SUPPLEMENTARY EVIDENCE REQUIREMENTS
<p>This unit requires 1 piece of supplementary evidence for each job description. If the authentication of the evidence is obvious i.e. the document refers directly to the apprentice and site then there is no requirement for the WBR to endorse the evidence. However in <b>all other instances</b> the WBR must endorse the document and state that the evidence produced by the apprentice does in fact relate to the job the apprentice is using for evidence. The apprentice must also endorse each individual piece of documentary evidence. The following list highlights the type of evidence that is acceptable for Unit 302.</p> <p>Put your supplementary evidence in an A4 plastic wallet, place it at the end of each unit and complete the Documentary Evidence Log at the front of this logbook.</p>	
Type of evidence	
Permit to work (must be job specific)	
Information on the fault found by testing (must be job specific)	
Job card	
Marked up and authenticated installation drawings	
Fully authenticated photographs	

UNIT 302 LOG BOOK CHECKLIST		
Please use this checklist to ensure that you have completed this unit correctly.		
	Yes	No
Location of job given		
Dates job started and finished are entered correctly		
Three types of electrical fault covered		
Three types of electrical system covered		
Two types of safe system of work covered		
Three types of electrical equipment covered		
Boxes (P.O.) ticked where appropriate		
One piece of relevant evidence per job description		
Apprentice and WBR have signed each job description page.		



<b>UNIT 302 ASSESSOR REPORT</b> (Please state the outcome of your assessment. If all the standards are unable to be met, state where the candidate is not yet competent.)		
Date:		
Assessor Signature:		
Assessor Name:		
Date:		

<b>UNIT 302 FEEDBACK GIVEN TO CANDIDATE</b> (Please state the required action to be taken by the candidate)		
Date:		
I confirm that additional knowledge questions were asked and I agree the comments made above.		
Candidate Signature:		
Date:		

**Unit 303 Provide technical and functional information about electrotechnical systems & equipment to relevant people**

This unit is for you if you pass on technical or functional information relative to systems and equipment on which you have been working. This could be on appropriate occasions or at handover and with the right amount of detail bearing in mind the level of awareness of the person receiving the information.

You therefore need to show that you possess the skills & knowledge to:

- Identify who should receive such information and at what level of detail.
- Supply the information that is within your job capability and responsibility.
- Pass on necessary safety considerations in the correct manner.

**What you need to do next:**

Look at the “key words and phrases” given below. These explain some words and phrases that have been used in this unit and which will help you understand it more easily.

**KEY WORDS AND PHRASES**

Safe system of work:	This refers to a system of work that includes procedures such as safe isolation, permit to work, use of PPE and other relevant procedures identified by your risk assessment.
Electrical systems:	This includes ELV & LV single and multi-phase power, controls and lighting.
Electrical equipment:	This includes electrical plant, components and accessories, motors & starters switchgear & distribution, control systems and components & luminaires.
Technical information:	Includes information covering installation & equipment specifications and manufacturers data and instructions.
Functional information:	Includes information covering user instructions, including when professional expertise should be called upon.
Relevant people:	This includes customers, clients, charge hands, supervisors, other contractors and those working on machinery affected by your work.

**EVIDENCE REQUIREMENTS**

*Evidence of competent performance is required from:*

- Two different relevant persons, both technical and functional information, two types of electrical system and two types of electrical equipment.

## UNIT 303 Provide technical and functional information to relevant people about electrotechnical systems & equipment

### Job Description One

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site							
Date job started				Date job finished			
Brief description of job:							
<b>PO</b>	<b>Tasks that you must complete on each job</b>						<b>Assessor/IV tick</b>
1,2	I identified the relevant people that needed to be supplied with technical or functional information and discussed their information requirements. <u>Describe here how you did this:</u>						
Tick	Client/customer		Supervisor		Other contractors	Colleagues & others	
4	I assessed the nature and extent of information required by the relevant people in order for the installation or equipment to be operated safely and effectively. <u>Describe here how you did this:</u>						
Tick	Functional		Technical				
3	I obtained current and relevant information from appropriate sources. <u>Describe here how you did this:</u>						
Tick	Luminaires		Components & accessories		Switchgear & distribution	Controls	
	ELV/LV		Single/multi-phase		Lighting	Power	
						Motors & starters	
						Controls	
Apprentice signature		WBR signature			Date		

PO	Tasks that you must complete on each job	Assessor/IV tick
5	I passed on all information in a timely, courteous and professional manner. <u>Describe here how you did this:</u>	
6	I provided written technical and functional information to the relevant people in accordance with organisational procedures. <u>Describe here how you did this:</u>	
7	I confirmed that the relevant people received any necessary health & safety information & advice in the approved manner. <u>Describe here how you did this:</u>	

Apprentice signature		WBR signature		Date	
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## UNIT 303 Provide technical and functional information to relevant people about electrotechnical systems & equipment

### Job Description Two

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site							
Date job started				Date job finished			
Brief description of job:							
<b>PO</b>	<b>Tasks that you must complete on each job</b>						<b>Assessor/IV tick</b>
1,2	I identified the relevant people that needed to be supplied with technical or functional information and discussed their information requirements. <u>Describe here how you did this:</u>						
Tick	Client/customer		Supervisor		Other contractors	Colleagues & others	
4	I assessed the nature and extent of information required by the relevant people in order for the installation or equipment to be operated safely and effectively. <u>Describe here how you did this:</u>						
Tick	Functional		Technical				
3	I obtained current and relevant information from appropriate sources. <u>Describe here how you did this:</u>						
Tick	Luminaires		Components & accessories		Switchgear & distribution	Controls	
	ELV/LV		Single/multi-phase		Lighting	Power	
						Motors & starters	
						Controls	
Apprentice signature		WBR signature			Date		

PO	Tasks that you must complete on each job	Assessor/IV tick
5	I passed on all information in a timely, courteous and professional manner. <u>Describe here how you did this:</u>	
6	I provided written technical and functional information to the relevant people in accordance with organisational procedures. <u>Describe here how you did this:</u>	
7	I confirmed that the relevant people received any necessary health & safety information & advice in the approved manner. <u>Describe here how you did this:</u>	

Apprentice signature		WBR signature		Date	
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## UNIT 303 Provide technical and functional information to relevant people about electrotechnical systems & equipment

### Job Description Three

(If you need more space to complete your descriptions, please use the continuation page at the back of the logbook)

Name & location of site							
Date job started				Date job finished			
Brief description of job:							
<b>PO</b>	<b>Tasks that you must complete on each job</b>						<b>Assessor/IV tick</b>
1,2	I identified the relevant people that needed to be supplied with technical or functional information and discussed their information requirements. <u>Describe here how you did this:</u>						
Tick	Client/customer		Supervisor		Other contractors	Colleagues & others	
4	I assessed the nature and extent of information required by the relevant people in order for the installation or equipment to be operated safely and effectively. <u>Describe here how you did this:</u>						
Tick	Functional		Technical				
3	I obtained current and relevant information from appropriate sources. <u>Describe here how you did this:</u>						
Tick	Luminaires		Components & accessories		Switchgear & distribution	Controls	
	ELV/LV		Single/multi-phase		Lighting	Power	
						Motors & starters	
						Controls	
Apprentice signature		WBR signature			Date		

PO	Tasks that you must complete on each job	Assessor/IV tick
5	<p>I passed on all information in a timely, courteous and professional manner.  <u>Describe here how you did this:</u></p>	
6	<p>I provided written technical and functional information to the relevant people in accordance with organisational procedures.  <u>Describe here how you did this:</u></p>	
7	<p>I confirmed that the relevant people received any necessary health &amp; safety information &amp; advice in the approved manner.  <u>Describe here how you did this:</u></p>	

Apprentice signature		WBR signature		Date	
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### UNIT 303 SUPPLEMENTARY EVIDENCE REQUIREMENTS

This unit requires 1 piece of supplementary evidence for each job description. If the authentication of the evidence is obvious i.e. the document refers directly to the apprentice and site then there is no requirement for the WBR to endorse the evidence. However in **all other instances** the WBR must endorse the document and state that the evidence produced by the apprentice does in fact relate to the job the apprentice is using for evidence. The apprentice must also endorse each individual piece of documentary evidence. The following list highlights the type of evidence that is acceptable for Unit 303.

Put your supplementary evidence in an A4 plastic wallet, place it at the end of each unit and complete the Documentary Evidence Log at the front of this logbook.

Type of evidence
Information given to customers (must be job specific)
Manufacturers instructions on the use of equipment (must be job specific and not the fitting instructions)
Extracts from installation specification
Installation drawings
Fully authenticated photographs

### UNIT 303 LOG BOOK CHECKLIST

Please use this checklist to ensure that you have completed this unit correctly.

	Yes	No
Location of job given		
Dates job started and finished are entered correctly		
Two types of relevant person covered		
Two types of electrical system covered		
Both technical and functional information covered		
Two types of electrical equipment covered		
Boxes (P.O.) ticked where appropriate		
One piece of relevant evidence per job description		
Apprentice and WBR have signed each job description page.		

<b>Unit 303 Additional knowledge questions asked, with recorded apprentice response</b>		
As many questions as may be required per unit should be asked to confirm the candidates understanding. Please insert the relevant PO number against each question.		
<b>PO No.</b>	<b>Written Question</b> <i>(To be written by assessor)</i>	<b>Candidates response</b> <i>(To be written by assessor)</i>

<b>UNIT 303 ASSESSOR REPORT</b> (Please state the outcome of your assessment. If all the standards are unable to be met, state where the candidate is not yet competent.)		
Date:		
Assessor Signature:		
Assessor Name:		
Date:		

<b>UNIT 303 FEEDBACK GIVEN TO CANDIDATE</b> (Please state the required action to be taken by the candidate)		
Date:		
I confirm that additional knowledge questions were asked and I agree the comments made above.		
Candidate Signature:		
Date:		

## **UNIT 301 (NET 18): Ensure safe site working**

### **PERFORMANCE OBJECTIVES**

#### **You must ensure that:**

- 1) You carry out an assessment of risks on the site to comply with health and safety regulations and other relevant legislation.
- 2) You plan a safe system of work and agree it with the relevant person(s).
- 3) You use suitable warning notices and barriers to prevent unauthorised entry to the work site as identified by your risk assessment.
- 4) You monitor regularly that the working conditions remain safe for work to continue.
- 5) You minimise the risks associated with using tools, plant and access equipment by following health and safety requirements and suppliers' instructions.
- 6) You check that all tools, plant and access equipment available on site are stored safely and securely during work activities and are moved on completion.
- 7) You check that the work site is cleared after the work ends and left in a safe and satisfactory condition in accordance with health and safety regulations and good housekeeping practice.

## **UNIT 302 (NET 54): Diagnose and correct faults in electrotechnical systems and equipment**

### **PERFORMANCE OBJECTIVES**

#### **You must ensure that:**

- 1) You obtain clear and detailed information about the faults including the system specification relating to the electrotechnical systems and equipment.
- 2) You advise the relevant people clearly and accurately about the potential disruption and consequences of carrying out a diagnosis and correction of faults.
- 3) You agree the appropriate repairs and their implications with the relevant people in accordance with organisational procedures.
- 4) You conduct an assessment of safe working practices and perform suitable tests on the installed electrotechnical systems and equipment, safely, to identify the fault.
- 5) You follow the correct procedures for carrying out a safe and secure isolation, where required, before diagnosing and correcting the fault.
- 6) You follow the correct procedures when rectifying the fault, including using the appropriate tools, equipment and materials.
- 7) Where the fault cannot be corrected immediately, you leave the electrotechnical systems and equipment safe in accordance with industry regulations.
- 8) You inspect and test that the repaired electrotechnical systems and equipment are functioning in accordance with the relevant Industry Standards and specifications.
- 9) You inform the relevant people about the test results and complete the documentation clearly and accurately.

## **UNIT 303 (NET 70): Provide technical and functional information to relevant people about electrotechnical systems and equipment**

### **PERFORMANCE OBJECTIVES**

#### **You must ensure that:**

- 1) You identify the relevant people that need to be supplied with technical and functional information.
- 2) You discuss, with the relevant people, their technical and functional information requirements.
- 3) You obtain current and relevant information from appropriate sources.
- 4) You assess the nature and extent of information required by the relevant people in order for the installation, or equipment, to be operated safely and effectively.
- 5) You pass on the information in a timely, courteous and professional manner and in accordance with organisational procedures.
- 6) You provide written technical and functional information to the relevant people in accordance with organisational procedures.
- 7) You confirm that the relevant people receive the necessary health and safety information and advice in the approved manner.

## **UNIT 304 (NET 8I): Maintain a healthy and safe working environment**

### **PERFORMANCE OBJECTIVES:**

#### **You must ensure that:**

- 1) You identify which workplace health and safety procedures are relevant to your working environment.
- 2) You identify evacuation procedures and emergency exits before work commences.
- 3) You review your working practices and your working environment for hazards that could cause serious harm.
- 4) You control those health and safety hazards within your capability and job responsibility limits.
- 5) You report those hazards that may present a high risk to the relevant persons responsible for health and safety in the workplace.
- 6) Your personal conduct around the workplace does not endanger the health and safety of yourself or other persons.
- 7) You follow the workplace policies and suppliers' or manufacturers' instructions for the safe use of tools, plant and equipment.
- 8) You follow agreed procedures in the event of an emergency.
- 9) You follow correct procedures in the event of injuries to self and others.

## **UNIT 305 (NET 20) - Prepare to install wiring systems, wiring enclosures and equipment**

### **PERFORMANCE OBJECTIVES**

#### **You must ensure that:**

- 1) You confirm at the outset with the relevant person that your plans for the installation meet their expectations.
- 2) You review the working environment and working conditions for any changes that might impact on the installation due to take place.
- 3) You have wiring systems, wiring enclosures and equipment of the right type, amount and size available to undertake the installation.
- 4) You confirm that the selected wiring systems, wiring enclosures and equipment are compatible with all other available site services.
- 5) You confirm that the wiring systems, wiring enclosures and the equipment are fit for purpose and meet the needs of the installation.
- 6) You seek confirmation that there are no hazards that could harm yourself or other people within the building fabric prior to commencement of the installation.
- 7) You use fixings that are fit for purpose and appropriate for the site structure and building fabric.
- 8) You follow all appropriate manufacturers' instructions for wiring systems, wiring enclosures and equipment.

## **UNIT 306 (NET 23) - Install wiring systems, wiring enclosures and equipment**

### **PERFORMANCE OBJECTIVES**

#### **You must ensure that:**

- 1) You confirm the existing electrical supply is compatible with the planned installation in accordance with laid down procedures.
- 2) You follow agreed procedures to ensure the co-ordination of site services and the activities of other trades.
- 3) You identify accurately the means of electrical isolation prior to commencing installation.
- 4) When required, you carry out isolation procedures to ensure a safe installation in accordance with electrical regulations and approved procedures.
- 5) You measure and mark out all locations for wiring systems, wiring enclosures and equipment in accordance with electrical regulations and to meet an agreed specification.
- 6) You check that the planned locations are sensible, visually acceptable and are in accordance with other site services.
- 7) You fix the wiring systems, wiring enclosures and equipment safely and in accordance with relevant regulations and manufacturers instructions.
- 8) You report to relevant people those necessary variations to the planned programme of work that may have the potential to be dangerous or have a cost implication.
- 9) You seek the appropriate action from the relevant people.

### **UNIT 307 (NET 41I): Connect wiring systems and equipment using safe and approved methods**

#### **PERFORMANCE OBJECTIVES**

**You must ensure that:**

- 1) You are working within a safe system of work and that you identify any foreseeable hazards relating to the connection of wiring systems, wiring enclosures and equipment.
- 2) You identify accurately the means of electrical isolation prior to connection.
- 3) When required, you carry out isolation procedures to ensure a safe connection in accordance with electrical regulations and approved procedures.
- 4) You make connections in accordance with specifications and comply with IEE wiring regulations as specified in the most recent British Standard for Electrical Installations.
- 5) You check the connections are electrically and mechanically sound, and ensure that they are identified correctly and clearly.
- 6) Where appropriate, you take safe and sensible action to remedy any identified defects after connection has taken place.
- 7) You complete any necessary documentation about the work legibly, accurately and timely in accordance with organisational requirements.

### **UNIT 308 (NET 45): Inspect, test & commission an electrical installation**

#### **PERFORMANCE OBJECTIVES**

**You must ensure that:**

- 1) You plan and agree the inspecting, testing and commissioning procedures with relevant people on site.
- 2) You undertake an assessment of safe working practices in accordance with general and industry specific health and safety regulations.
- 3) You follow the correct procedures for identifying and carrying out a safe isolation before inspecting, testing and commissioning the electrical installation.
- 4) You confirm that your test instruments are appropriate to the job in hand, fit for purpose and are in calibration.
- 5) You conduct an inspection in accordance with the IEE wiring regulations as specified in the British Standard for Electrical Installations.
- 6) You conduct the required tests in accordance with IEE wiring regulations as specified in the British Standard for Electrical Installations and in accordance with manufacturers' instructions.
- 7) You confirm the installation is in accordance with IEE wiring regulations as specified in the British Standard for Electrical Installations and in accordance with manufacturers' instructions and the specification.
- 8) You prepare a formal record of testing which confirms the safety and integrity of the installation, in accordance with organisational procedures and IEE wiring regulations as specified in the BS for Electrical Installations.
- 9) You handover the installation to relevant people and ensure that they have sufficient information and documentation for continued safe and effective use of the installation.

## Job Description Continuation Sheet

You should keep this page as a blank master copy. If you need more space for your job descriptions, remove and photocopy this page as you require. Once completed, place the sheet behind the job description page in the unit it relates to.

Unit Number		
(Please enter the unit number (eg. 304) that you are writing about)		
PO Number	Your continued description	Assessor / IV tick

Apprentice signature		WBR signature		Date	
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