

# EXPERIENCED WORKER ASSESSMENT



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## Installation & Maintenance Electrician Experienced Worker Assessment **Skills Scan**

To be completed by the candidate

Candidate Name:

### TRAINING PROVIDER VERIFICATION \*(delete as required)

Does the candidate hold relevant L2 qualifications that have been verified? Yes: ☐ No: ☐

Does the candidate hold relevant L3 qualifications that have been verified? Yes: ☐ No: ☐

Approval obtained from TESP if qualification not listed in Tables A, B or C: Yes: ☐ No: ☐

A technical discussion has been carried out and has been Recorded/Documented\* for EQA purposes? Yes: ☐ No: ☐

Approval obtained from TESP if candidate is not a full time practising electrician: Yes: ☐ No: ☐

**I confirm I have authenticated the applicant's knowledge and experience and it meets IE/ME EWA registration requirements.**

Signature:

Name:

Organisation:

Date:

**NB: This version of the Skills Scan and all future revisions align with the Version 2 of the Installation & Maintenance Electrician apprenticeship standard.**

## Introduction

This self-assessment Skills Scan is designed to help you decide whether the Installation & Maintenance Electrician Experienced Worker Assessment (IE/ME EWA) is right for you by reviewing your knowledge and skills against the IE/ME EWA requirement. If you decide to enrol on the IE/ME EWA, your chosen provider will review the Skills Scan with you and will verify the information. The Skills Scan and supporting records must be retained by the provider for quality auditing purposes.

The IE/ME EWA mirrors the content of the Level 3 Installation & Maintenance Electrician Apprenticeship Standard and is designed for currently practising electricians with 5 or more years' experience working in the industry, not including time spent in education or training.

## STEP ONE: CHECK THAT YOU ARE ELIGIBLE

### Qualifications You Already Hold

A pre-requisite to registering on the IE/ME EWA is having knowledge and understanding that is comparable to the Level 3 Installation & Maintenance Electrician Qualification. **Candidates must hold at least a relevant Level 2 qualification as shown in the tables below.** Training providers must carry out a recorded or documented technical discussion to confirm that the candidate has up to date knowledge to the Level 3 standard across all areas of the Skills Scan. This must be retained for quality auditing purposes.

Candidates without relevant technical qualifications are not eligible to register for the IE/ME EWA.

**Non-UK qualifications:** candidates must obtain an Ecctis Electrotechnical mapping (Installation & Maintenance Electrician). Non-UK qualifications cannot be accepted without this.

The following is a list of currently accepted qualifications from the [EAS Qualifications Guide](#). If you hold any of these qualifications please tick the relevant boxes.

#### NOTES:

- **Non-UK qualifications:** any candidates holding electrical qualifications from outside of the UK will need to undertake the Ecctis mapping process (the specific electrotechnical mapping route and not the general mapping). Training providers must gain proof of this mapping and submit it to TESP for approval before enrolling candidates on the EWA.
- **Please note:** A qualification in Inspection & Testing, Periodic Inspection, Initial Verification or BS 7671 Wiring Regulations **does not** meet the requirement for an underpinning technical certificate.
- Where one of the listed qualifications covers both practical on-site performance and knowledge and understanding - it is the knowledge and understanding element that needs to have been achieved (e.g. the knowledge and understanding units in the Level 3 NVQ Diploma in Installing Electrotechnical Systems and Equipment (building structures and the environment)).
- You may hold a qualification such as EAL 600/6724/X, EAL 601/4561/4, C&G 2330 L2, C&G 2360 Pt 1 which are Level 2 VRQ pre-cursor qualifications to some of those listed below. These will partially count towards the knowledge and understanding requirements so please note these on the list.
- **Not sufficient to demonstrate underpinning knowledge:** City & Guilds Level 3 Certificate in the Building Regulations for Electrical Installations in Dwellings (2393-10) (Part-P Building Regulations); LCL Awards Domestic Electrical Installer certificate.

**If you hold another equivalent qualification not listed below which you think is relevant to the Knowledge required, please contact TESP for further guidance via [www.the-esp.org.uk/contact-us](http://www.the-esp.org.uk/contact-us).**

**Training providers must obtain approval from TESP before they can accept any qualifications not listed in Tables A, B and C.**

**Table A:** these should provide evidence of most of the underpinning knowledge but a technical discussion is needed to cover new technology areas detailed in the Skills Scan, unless these are already evidenced by additional Continuous Professional Development (CPD) qualifications.

Qualification Title	Awarding Organisations	Qualification Numbers (Ofqual)	Please tick
Level 3 NVQ Diploma in Installing Electrotechnical Systems and Equipment (Building Structures and the Environment)	City & Guilds 2357-13/91	501/2232/0	
	EAL	501/1605/8	
NVQ Level 3 Electrotechnical Services (Installation, Buildings and Structures)	City & Guilds 2356	100/2854/7	
	SQA	G7NY23	
Level 3 NVQ/Diploma in Electrotechnical Services	EAL	500/3526/5	
	EAL	100/4720/7	
	SQA	100/3104/2	
Level 3 Advanced Technical Diploma in Electrical Installation (450)	City & Guilds 8202-30	601/7307/5	
Level 3 Advanced Diploma in Electrical Installation	EAL	601/4563/8	
Level 3 Diploma in Electrical Installation (Buildings and Structures)	City & Guilds 2365-03	600/5499/2	
Level 3 Diploma in Electrical Installation	EAL	600/9331/6	
Level 3 IVQ Advanced Diploma in Electrical Installation	City & Guilds 6161-27	500/6029/6	
Level 3 SVQ Electrical Installation	SQA		
Advanced Diploma in Engineering and Technology	EAL		
Level 3 Award/Certificate in Building Services Engineering (Electrical)	ABC Awards	500/3925/8	
	ABC Awards	500/5528/8	
Electrical Installation Course Work (A and B Certificates)	City & Guilds	N/A	
Level 3 Certificate in Electrical Installation Work C Course	City & Guilds	100/1291/6	
Certificate in Electrical and Electronic Craft Studies	City & Guilds 236 Part 1 OR Part 2	N/A	
	City & Guilds 2360 Part 1 OR Part 2	N/A	
	City & Guilds 2367 OR 2368	N/A	
	City & Guilds 51A and 51B (A OR B Certs)	N/A	
Level 3 Certificate in Electrical Installation Theory and Practice Part 2	City & Guilds 2360-08	100/1290/4	
NVQ Level 3 or Level 2 Electrical Installation Engineering	City & Guilds 2350	N/A	

**Table A - continued:** these should provide evidence of most of the underpinning knowledge but a technical discussion is needed to cover new technology areas detailed in the Skills Scan, unless these are already evidenced by additional Continuous Professional Development (CPD) qualifications.

Qualification Title	Awarding Organisations	Qualification Numbers (Ofqual)	Please tick
Level 3 Certificate in Knowledge of Electrical Installation Engineering	City & Guilds 2351-01 or City & Guilds 2351-03	100/1292/8 N/A	
NVQ Level 3 in Installation and Commissioning Electrotechnical Systems	City & Guilds 2355	Q1052155	
Level 3 Certificate in Electrotechnical Technology Installation (Building and Structures)	City & Guilds 2330-07	100/3602/7	
Full Technological Certificate in Telecommunications	City & Guilds 270/271	N/A	
SCOTVEC Modules in Electrical Installation (1985-1995)	SCOTVEC		
Scottish Joint Industry Board Electrical Contracting Industry Craftsman Certificate	SJIB		

**Table B:** a recorded/documented auditable technical discussion must be held to ensure you can meet the full Level 3 knowledge requirements of the IE/ME EWA qualification.

Qualification Title	Awarding Organisations	Qualification Numbers (Ofqual)	Please tick
Level 3 Certificate in Installing, Testing and Ensuring Compliance of Electrical installations in Dwellings	EAL	600/7695/1	
	LCL Awards	601/7876/0	
	City & Guilds	600/7888/1	
Level 3 Certificate in Inspection, Testing, Design and Certification of Electrical Installations	City & Guilds	100/3599/0	
Level 3 Diploma in Electrotechnical Studies and Practice (Military Engineering)	Defence Awarding Organisation (DAO)	603/2673/6	
Military Engineer (Electrician) Class 2	Royal School of Military Engineering	N/A	
Level 3 Diploma in Electrical and Electronic Engineering Technology	EAL	501/1121/8	

**Table C:** a recorded/documented auditable technical discussion must be held to ensure you can meet the full Level 3 knowledge requirements of the IE/ME EWA qualification.

Qualification Title	Awarding Organisations	Qualification Numbers (Ofqual)	Please tick
NVQ Level 2 in Installing Electrotechnical Systems	City & Guilds	Q1052317	
Level 2 Certificate in Electrotechnical Technology	City & Guilds	2330	
Level 2 Technical Certificate in Electrical Installation	City & Guilds	603/0228/8	
Level 2 Intermediate Diploma in Electrical Installation	EAL	601/4561/4	
Level 2 Diploma in Electrical Installations (Buildings and Structures)	City & Guilds	600/5498/0	
Level 2 Diploma in Electrical Installation	EAL	600/6724/X	
Level 2 Diploma in Electrical and Electronic Engineering Technology	EAL	501/1094/9	

## Other Relevant Qualifications

Qualification Title	Awarding Organisations	Qualification Numbers (Ofqual)

## STEP TWO: COMPLETING THIS DOCUMENT

**You only should complete this section if you have determined in Step 1 that you are eligible and hold the relevant qualifications.**

To pass the IE/ME EWA you will need to demonstrate breadth and depth of knowledge and practical skills, covering all the areas listed in this Skills Scan. Be honest with yourself when completing it - if you cannot confidently tick "Adequate" as a minimum for every statement in terms of both Knowledge and Practical Experience, it's highly unlikely that you will be able to provide the evidence required to pass the IE/ME EWA. Once you enrol on the IE/ME EWA you will have a maximum 18 months to complete the process. It's important to ensure before enrolling that you will be able to undertake the range of work required to provide the evidence required for the performance assessments.

If you are not regularly working across the full breadth of work in the tables below, it's unlikely you will be able to complete the EWA within 18 months. Do not enrol until you are confident you can provide the evidence within that timescale, or consider an alternative training route - visit [www.electricalcareers.co.uk/routes](http://www.electricalcareers.co.uk/routes) for more information.

**Remember:** You'll only be able to use evidence for the IE/ME EWA performance assessments that is generated after you enrol on the IE/ME EWA - so you'll need to be working day-to-day on activity that covers the breadth of what is required. You may have evidence from past work that will confirm that you're a suitable candidate for IE/ME EWA, but you'd still need to be currently working as an electrician in order to create evidence for the practical units.

## Safe Isolation and Risk Assessment

To demonstrate occupational competence, you will be expected to:

	For each item please tick one box in the Knowledge section and one box in the Experience section							
	KNOWLEDGE				EXPERIENCE			
	Limited	Adequate	Extensive	Unsure	Limited	Adequate	Extensive	Unsure
Carry out and document an assessment of risk								
Carry out safe isolation in the correct sequence on a single-phase circuit								
Carry out safe isolation in the correct sequence on a three-phase circuit								
Carry out safe isolation in the correct sequence on a three-phase installation								

## Installation

This section has areas where you will need to demonstrate occupational competence in accordance with statutory and non-statutory regulations and approved industry working practices.

	For each item please tick one box in the Knowledge section and one box in the Experience section							
	KNOWLEDGE				EXPERIENCE			
	Limited	Adequate	Extensive	Unsure	Limited	Adequate	Extensive	Unsure
Interpretation of specifications and technical data								
Selection of protective devices								
Install protective equipotential bonding								
Install and terminate PVC singles cable								
Install and terminate PVC/PVC multi-core & cpc cable								
Install and terminate SY multi-flex cable								
Install and terminate heat-resistant flex								
Install and terminate XLPE SWA								
Install and terminate data-cable								

## Installation - continued

	For each item please tick one box in the Knowledge section and one box in the Experience section							
	KNOWLEDGE				EXPERIENCE			
	Limited	Adequate	Extensive	Unsure	Limited	Adequate	Extensive	Unsure
Install and terminate FP200 type cable								
Forming and install 20mm metal conduit								
Forming and install 20mm PVC conduit								
Installation of at least three other wiring systems e.g. cable tray, trunking, cable ladder, cable basket, modular wiring, or busbar systems								
Install protective devices in a TP&N distribution board								
Install a two-way and intermediate lighting circuit in PVC/PVC multi-core cable								
Install a BS 1363 13A socket outlet ring circuit in PVC singles cable								
Install a carbon monoxide detector safety service circuit in FP200 type cable								
Install data outlets circuit in Cat. 5 cable								
Install a BS EN 60309 16A T P & N socket outlet in XLPE SWA cable								
Install protective equipotential bonding to gas and water services								
Connect a 3-phase direct on line motor circuit in SY cable								
Install an S Plan central heating and hot water system with a solar thermal sustainable energy element utilising heat resistant flexible cable and PVC singles cable								

## Inspection and Testing

In this area you will be expected to follow practices and procedures that take into account electrically sensitive equipment. To demonstrate occupational competence, you will be expected to:

	For each item please tick one box in the Knowledge section and one box in the Experience section							
	KNOWLEDGE				EXPERIENCE			
	Limited	Adequate	Extensive	Unsure	Limited	Adequate	Extensive	Unsure
Undertake an assessment of risk and work according to best practice as required by Health and Safety legislation								
Ensure the installation is correctly isolated before commencing the inspection and test activity								
Carry out a visual inspection of the installation in accordance with BS 7671 and IET Guidance Note 3								
Complete the following tests on the installation in accordance with BS 7671 and IET Guidance Note 3:								
1 Continuity of protective conductors								
2 Continuity of ring final circuit conductors								
3 Insulation resistance								
4 Polarity								
5 Earth fault-loop impedance (EFLI)								
6 Prospective fault current (PFC)								
7 Check for phase sequence and phase rotation								
8 Functional testing								
Verify that the test results obtained conform to the values required by BS 7671 and IET Guidance Note 3								
Complete an electrical installation certificate, schedule of inspections and schedule of test results using the model forms as illustrated in Appendix 6 of BS 7671								



## Fault Diagnosis and Rectification

	For each item please tick one box in the Knowledge section and one box in the Experience section							
	KNOWLEDGE				EXPERIENCE			
	Limited	Adequate	Extensive	Unsure	Limited	Adequate	Extensive	Unsure
Undertake an assessment of risk and work according to best practice as required by Health and Safety legislation								
Correctly identify and use tools, equipment and test instruments that are fit for purpose								
Carry out checks and preparations that must be completed prior to undertaking fault diagnosis								
Identify faults from 'fault symptom' information								
State and record how the identified faults can be rectified								

## Assessment of Applied Knowledge

To demonstrate occupational competence you will be assessed on your knowledge of:

	For each item please tick one box in the Knowledge section and one box in the Experience section							
	KNOWLEDGE				EXPERIENCE			
	Limited	Adequate	Extensive	Unsure	Limited	Adequate	Extensive	Unsure
Health and Safety								
BS 7671: Requirements for Electrical Installations								
Building Regulations								
Inspection, Testing and Fault Finding								

## Identifying any further knowledge or experience required

Having completed the Skills Scan, summarise any areas where you feel further knowledge or experience may be required before undertaking the assessment.

### Knowledge

List items	Tick when achieved

### Experience

List items	Tick when achieved

## Understanding my Results

### I'VE TICKED ADEQUATE IN ALL, OR NEARLY ALL, OF THE BOXES:

- This suggests the IE/ME EWA is right for you.
- Think about the boxes where you can't tick Adequate - if the gaps are around Knowledge, you may be able to do some self-study or training to top up. If the gap is in terms of Practical Experience, think about whether there are options within your current role to cover these areas.
- You should now complete the Candidate Background form available from the EWA website and choose a training provider - see **[www.electrical-ewa.org.uk](http://www.electrical-ewa.org.uk)** for more details.
- You will need to give a copy of the Skills Scan to the training provider. They will need to discuss it with you to verify the information you have provided.
- You will also need to provide certificates for any relevant qualifications so that these can be verified.

### I SEEM TO HAVE QUITE A FEW GAPS AROUND KNOWLEDGE:

- You might need to undertake some further training or study in order to fill these before you can take the IE/ME EWA.
- If you're not sure what would be required, talk to a training provider.
- Make sure that any recommended training or qualifications can be recognised as meeting the IE/ME EWA requirements. A list of accepted qualifications is contained within the Skills Scan.
- If the Knowledge gaps are significant, and you also need additional practical experience which is likely to take at least 12 months to obtain, you should consider enrolling on an apprenticeship. There are no age restrictions and any training and the cost of the end assessment will be funded. You can find more details at **[www.electricalcareers.co.uk/ewa-info](http://www.electricalcareers.co.uk/ewa-info)**.

### I SEEM TO HAVE QUITE A FEW GAPS AROUND PRACTICAL EXPERIENCE:

- If it's likely to take at least 12 months to obtain sufficient practical experience, you should consider enrolling on an apprenticeship. There are no age restrictions and any training and the cost of the end assessment will be funded. You can find more details at **[www.electricalcareers.co.uk/ewa-info](http://www.electricalcareers.co.uk/ewa-info)**.
- If you don't meet the requirements for an apprenticeship, think about whether it's possible to gain the experience by taking on different tasks within your work.
- If you're employed, talk to your employer about possible options. If you're self-employed, consider whether it's possible to broaden the work you undertake to fill the gaps.

## Next Steps

Once you've completed the Skills Scan, save the document - if you wish to register on the IE/ME EWA you will need it for the discussion with a training provider. If the IE/ME EWA isn't the right route for you, it provides a useful record of the gaps you will need to fill if you intend to take the IE/ME EWA in the future.