

Electrical Level 2 and Level 3 Diploma mapping to Level 3

From EAL Level 2 Diploma in Electrical installation EAL Building Services Engineering (Level 3) - Electrotechnical Installation C00/4278/8

All learners being considered for RPL must have had a skills scan by a relevant member of staff to determine if they still have the relevant knowledge and skills from the qualification achieved, they could have achieved the qualification several years ago and had limited contact in the Electrical industry and their knowledge may have diminished, therefore the skills scan may identify further areas that need additional learning.

All the graded assessments in EAL Building Services Engineering (Level 3) – Electrotechnical Installation C00/4278/8 need to be completed regardless of the level of prior achievement and learning attained.

Any decisions made need to be kept and used as part of the ongoing quality assurance process and available on request from the EAL EQA.

Other Awarding Organisations Qualifications can be used as RPL, Centres should contact the EAL EQA for the latest guidance.

Important note:

Please be reminded this information is for guidance purposes only and any decision you reach must have evidence to support it.

The COO/4278/8 has a safety critical test (practical assessments). Learners who have completed the relevant practical assessments in:

- EAL Level 2 Diploma in Electrical Installation / EAL Progression in Building Services Engineering (Level 2)
- EAL Level 3 Diploma in Electrical Installation

-or similar qualification assessment - such as C&G 2365, EAL 501/1605/8 etc.

-may use the achievement as a proxy against the relevant safety critical practical assessment within the COO/4278/8.

Learners who have completed the EAL Level 2 Diploma in Electrical Installation or the electrical pathway in the EAL Progression in Building Services Engineering (Level 2) would only need to complete tasks 01, 05A, 06, and 07.

Learners who have completed the EAL Level 2 and 3 Diplomas in Electrical Installation would only need to complete task 01 (to help embed safe isolation).

Electrical Level 2 and Level 3 Diploma mapping to Level 3 2

QW Level 3 Unit number and title	Learning outcome	EAL L2 Diploma in Electrical installation only	EAL L2 and L3 Diploma in Electrical installation
Unit 301: Understanding Building Services Engineering Practice in Wales	1. Know the relevant trade bodies and organisations within the building services engineering sector		
	2. Understand connected practice in construction and building services engineering		
	3. Know the changing construction and built environment sector		
	4. Know the changes in building services engineering materials, tools, and techniques over time		
	5. Understand the relationship between trades and the environment		
Unit 302: Working in The Building Services Engineering Sector in Wales	1. Understand the built environment in Wales		
Services Engineering Sector in Wales	2. Understand how to work effectively with others		If taken unit QELTK3/003
Unit 304 Planning and Evaluating Work in the Building Services Engineering Sector in Wales	1. Plan the work required to complete the task(s)		
	2. Evaluate the work completed against the task brief and success criteria		
Unit 303: Understand Health and Safety and Environmental Legislation in The Building Services Engineering Sector	Understand appropriate industry standards and regulations		
	Know your responsibilities in accordance with organisational procedures		
	Understand the application, advantages, and limitations of different working practices		
	Know how to recognise materials and substances that can potentially be harmful		

QW Level 3 Unit number and title	Learning outcome	EAL L2 Diploma in Electrical installation only	EAL L2 and L3 Diploma in Electrical installation
	Understand the documentation associated with the organisational procedures' requirements		
	Understand the organisational procedures for dealing with the presence of harmful materials and substances		
	Know where and how to locate relevant health and safety information needed to complete the installation and/or maintenance activity in accordance with organisational procedures		
	Know what constitutes a hazard or risk		
	Understand the methods for handling of hazardous materials and substances in accordance with organisational procedures		
	Understand the organisational procedures, suppliers' and manufacturers' instructions for safe use, maintenance, handling, transport, and storage of:		
	tools, plant, and access equipment		
	equipment and components		
	materials and substances		
	Understand the warning signs for hazardous materials and substances		
	Understand the methods for the safe transport and/or disposal of waste material, substances, and liquids in accordance with:		If taken unit QELTK3/003
	organisational procedures		
	suppliers' and manufacturers' instructions		
	Understand the organisational procedures relevant to reporting issues		

QW Level 3 Unit number and title	Learning outcome	EAL L2 Diploma in Electrical installation only	EAL L2 and L3 Diploma in Electrical installation
Unit 304E: Understand How to Install Enclosures for Electrical Cables, Conductors and Wiring Systems	Understand the operation, applications, advantages, and limitations of different electrical systems		
	Understand the appropriate industry standards, regulations, and requirements relevant to installing enclosures		
	Understand the applications, advantages, and limitations of types of enclosures		
Unit 305E: Understand How to Install and Connect Electrical Cables, Conductors, Wiring Systems and Equipment	Understand the applications, advantages, and limitations of types of electrical cables, conductors, wiring systems, associated equipment, accessories and components		
	Understand the industry recognised methods for determining the type, size and rating of electrical cables, conductors, wiring systems, associated equipment, accessories, and components in relation to the electrical system's design		
	Understand how to install and connect types of electrical cables, conductors, wiring systems, associated equipment, accessories, and components		
Unit 306E: Understand How to Inspect and Test De-Energised Electrical Circuits	Understand how to select the instruments to be used for carrying out relevant tests		
	Understand the methods and procedures for conducting a visual inspection on the enclosures cables, conductors and wiring systems		
	Understand the correct procedure for safe isolation		
	Understand the methods and processes to carry out correctly the tests that ensure safe and efficient operation of the electrical system		
	Understand methods for providing clear and accurate information to relevant people		

QW Level 3 Unit number and title	Learning outcome	EAL L2 Diploma in Electrical installation only	EAL L2 and L3 Diploma in Electrical installation
Unit 307E: Understand Intermediate Electrical Science and Principles	Understand fundamental mathematical principles which are appropriate to electrical installation work		
	Understand standard units of measurement used in electrical installation and design work		
	Understand basic mechanics and the relationship between force, work, energy and power		
	Understand the fundamental relationship between resistance, resistivity, voltage, current and power		
	Understand fundamental principles which underpin the relationship between magnetism, electricity, generation, and supply systems		
Unit 312: Apply Health and Safety and Environmental Legislation in the Building Services Engineering Sector	N/A This unit is assessed via Practical Project and covered by the Employer Confirmation		
Unit: 313: Establish and Maintain Relationships in the Building Services Engineering Sector	Understand the types of technical and functional information that is available for the installation and/or maintenance activity		If taken unit QELTK3/003
	Understand the procedures for supplying technical and functional information to relevant people		If taken unit QELTK3/003
	Understand the importance of customer service in relation to installation and/or maintenance activity		If taken unit QELTK3/003
	Performance 1-9 N/A (assessed via Practical Project and covered by the Employer Confirm	nation)	

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Unit 314: Coordinate a Work Site in the Building Services Engineering Sector	Understand the requirements for organising and overseeing work activities		If taken unit QELTK3/003
	Understand the requirements for organising the provision and storage of resources that are required for work activities		If taken unit QELTK3/003
	Performance 1-11 N/A (assessed via Practical Project and covered by the Employer Confir	mation)	
Unit 315E: Installation of Wiring Systems	Understand the operation, applications, advantages, and limitations of different electrical systems		(If taken the optional wiring regulations unit)
	Understand the appropriate industry standards and regulations relevant to installing enclosures		
	Understand the applications, advantages and limitations of types of enclosures		
	Understand the appropriate industry standards, regulations, and procedures relevant to installing and connecting electrical cables, conductors, wiring systems, associated equipment, accessories and components		
	Understand the industry recognised methods for determining the type, size and rating of electrical cables, conductors, wiring systems, associated equipment, accessories and components in relation to the electrical system's design		
	Performance 1-13 N/A (assessed via Practical Project and covered by the Employer Confirmation)		
Unit 316E: Install and Connect Electrical Cables, Conductors, Wiring Systems and Equipment	Unit assessed via Practical Project and covered by the Employer Confirmation		

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Unit 317E: Inspect, Test and Commission Electrical Systems and Equipment	Understand the requirements for inspection and testing		
	Understand the methods and procedures for conducting an inspection of electrical installations prior to their being placed into service		
	Understand the methods and processes to carry out correctly the tests that ensure safe and efficient operation of the electrical system		
	Understand the requirements for the completion of electrical installation certificates, associated documentation and handover		
	Performance 1- 12 N/A (assessed via Practical Project and covered by the Employer Confi	Employer Confirmation)	
Unit 318E: Identify and Rectify Faults in Electrical Systems and Equipment	Understand the health and safety requirements relevant to fault diagnosis.		
Electrical Systems and Equipment	Understand the importance of reporting and communication in fault diagnosis		
	Understand the nature and characteristics of electrical faults		
	Understand the fault diagnosis procedure		
	Understand the procedures and techniques for correcting electrical faults		
	Performance 1- 18 N/A (assessed via Practical Project and covered by the Employer Confi	rmation)	

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Unit 319E:	Understand renewable and other sources of electricity		
• Understand	Understand the properties of electrical circuits and components		
 Advanced Electrical Science and Principles 	Understand the operating principles and applications of D.C. machines and A.C. motors		
	Understand the principles and applications of electrical lighting systems		
	Understand the principles and applications of electrical heating		
	Know the types, applications, and limitations of electronic components in electrical systems and equipment		