

REGULATED QUALIFICATION FRAMEWORK (RQF) QUALIFICATION SPECIFICATION

 LCL Awards Level 3 Award in the Requirements for Electrical Installation BS7671:2018 (603/3132/X)

1. Objective:

This qualification has been updated to cover the additional criteria in amendment 2 (2022) of BS7671:2018+A1:2020+A2:2022 and is designed to promote <u>Safety</u> and <u>Competence</u> within the Electrotechnical Sector.

The objective of this qualification is for learners to demonstrate they know the scope, object and fundamental principles of BS7671, along with the definitions used within BS7671, how to assess the general characteristics of electrical installations and the requirements of protection for safety of electrical installations.

Learners will know the requirements for selection and erection of equipment for electrical installations along with the requirements for the inspection and testing of electrical installations.

Leaners will be able to demonstrate knowledge of the requirements of special installations and locations as identified in BS7671 and along with the information contained within Part 8 and the appendices of BS 7671.

The target groups for this qualification are those learners who are;

- 1. Preparing for employment, new entrants to the occupation.
- 2. Updating occupational competence, continuous professional development and or obtaining a licence to practice.
- 3. Preparing for further learning or training and/or developing knowledge and or skills in a subject area who are existing workers in the occupation seeking to extend their range of work.

2. Qualification Framework:

The qualification comprises of 1 mandatory Unit;

Unit Title	Unit Reference Number	Type of Unit	Level	Credit Rating
Understand the Requirements of Electrical Installations BS 7671 (2022)	LCL-E3004	Knowledge and Understanding	3	4



Qualification Structure:

LCL Awards Level 3 Award in the Requirements for Electrical Installation BS7671:2018

- o QAN 603/3132/X
- o QW C00/1234/1
- o The Guided Learning Hours (GLH) are **35 hours**
- o The Total Qualification Time (TQT) is 40 hours
- o The total credit required to achieve the qualification is 4

3. Unit Grading Structure:

Learning Outcomes	Number of questions	%
1 Understand the scope, object and fundamental principles of BS7671.	4	7
2 Understand the definitions used within BS7671.	2	3
3 Understand how to assess the general characteristics of electrical installations	6	10
4 Understand requirements of Protection for safety for electrical installations	15	25
5 Understand the requirements for Selection and erection of equipment for electrical installations	14	23
6. Understand the requirements of Inspection and testing of electrical installations	4	7
7. Understand the requirements of special installations or locations as identified in BS 7671.	7	12
8 Understand the information contained within Part 8 and the appendices of BS 7671.	8	13
Total	60	100

This is a Pass or Fail qualification. The learner is required to successfully achieve a minimum of 60% for this qualification to be awarded.



4. Unit specification:

LCL-E3004: Understand the Requirements of Electrical Installations BS 7671 (2022) Assessment Method (WQMC)

Learning Outcome 01. The learner will know the scope, object and fundamental principles of BS7671

The learner will demonstrate knowledge of;

- 1.1 The scope of BS7671
- 1.2 The object of BS7671
- 1.3 The fundamental principles of BS7671

Learning Outcome 02. The learner will understand the definitions used within BS7671 *The learner will demonstrate knowledge of;*

- 2.1 The definitions used within BS7671
- 2.2 The definitions to the regulations and appendices of BS7671

Learning Outcome 03. The learner will understand how to assess the general characteristics of electrical installations

The learner will demonstrate knowledge of;

3.1 The requirements of assessing the general characteristics of electrical installations within the scope of BS7671

Learning Outcome 04. The learner will understand requirements of protection for safety for electrical installations

The learner will demonstrate knowledge of;

- 4.1 The requirements of protection for safety within the scope of BS7671
- 4.2 How this applies to electrical installations within the scope of BS7671 to include:
- protection against electric shock
- protection against thermal effects
- protection against over current
- protection against voltage disturbances and electromagnetic disturbances

Learning Outcome 05. The learner will understand the requirements for selection and erection of equipment for electrical installations

The learner will demonstrate knowledge of;

- 5.1 Identify the requirements for selecting and erecting equipment within the scope of BS7671
- 5.2 Interpret how this applies to electrical installations within the scope of BS7671 to include:
- common rules
- selection and erection of wiring systems
- protection, isolation, switching, control and monitoring
- earthing arrangements and protective conductors
- other equipment
- · safety services



Learning Outcome 06. The learner will understand the requirements of inspection and testing of electrical installations

The learner will demonstrate knowledge of;

- 6.1 The requirements for inspection and testing
- 6.2 How this applies to electrical installations

Learning Outcome 07. The learner will understand the requirements of special installations or locations as identified in BS7671

The learner will demonstrate knowledge of;

- 7.1 The requirements for special installations and locations
- 7.2 How this effect the general requirements of the regulations

Learning Outcome 08. The learner will understand the information contained within Part 8 and the appendices of BS 7671

The learner will demonstrate knowledge of,

- 8.1 The information in the appendices of BS7671
- 8.2 How the information contained in the appendices is used to support electrical installation activities
- 8.3 The information contained in Part 8 of BS 7671

5. National Occupational Standard:

The unit has a direct relationship with the National Occupational Standards for the areas of work contained within the Unit and has been approved by "The Electrical Skills Partnership" (TESP)

6. RQF Descriptor Level 3:

Knowledge descriptor;

- Has factual, procedural and theoretical knowledge and understanding of a subject or field of work to complete tasks and address problems that while well-defined, may be complex and non-routine.
- Can interpret and evaluate relevant information and ideas.
- Is aware of the nature of the area of study or work.
- Is aware of different perspectives or approaches within the area of study or work.

7. Prior knowledge, skills or understanding which the learner is required to have before taking the qualification:

Learners wishing to participate on this program need to be deemed able to complete. This would normally mean a qualified electrician or working as an electrician. It is a requirement on the Approved Centre (AC) to ensure that an Initial Assessment (IA) of a learners' capability to complete a qualification is carried out prior to registration. LCL guidance is provided to an AC on the methods which can be used to carry out the IA.



8. Units which a learner must have completed before the qualification will be awarded and any optional routes:

Learners must complete the one mandatory unit before the qualification will be awarded. See Section 4.0 above.

9. Other requirements which a learner must have satisfied before the learner will be assessed or before the qualification will be awarded:

Not Applicable.

10. The design and delivery of the examination associated with these units are based on the following documents:

Requirements for Electrical Installations BS 7671:2018+A2:2022

11. The criteria against which learners' level of attainment will be measured:

The Learning Outcomes and Assessment Criteria against which learners' level of attainment will be measured are detailed in Section 3 and 4.

12. Planned exemptions:

None.

13. Specimen assessment materials:

Not Applicable.

14. Specified levels of attainment:

Learners must achieve an overall pass mark of 60% as detailed in section 3 or more to pass the on-line assessment for the qualification to be awarded.

15. Other information:

Learners are required to have access to BS7671:2018 which incorporates amendment 2 (2022).

SSAs: 5.2 Construction Review Date: 11/03/2025



Assessment and Examination Terminology:

AC – Approved Centre; an examination conducted either at the approved centre or a location approved by the centre, using staff approved by the centre to conduct the examination.

CBSR – Closed Book Short Response; Short response written questions will be set by the awarding organisation and administered and marked locally at the approved centre by approved markers. Learners will be prohibited from using industry normative or informative documents.

CE – Customer Evidence; evidence provided by a customer in the form of a written witness statement confirming a competent performance by the learner. That evidence may also be provided by an employing supervisor or manager of the learner. Witness statements that relate to a technical competence will only be accepted from a person technically competent in that particular activity to provide the statement.

IK – Inferred Knowledge; inferred knowledge is assessed as part of a performance assessment by a centre approved assessor. To deem the learner as having sufficient knowledge the learner must satisfactorily pass the performance assessment.

LE – Learner Evidence; learner generated evidence is for example documented recordings of readings, calculations or the production of a risk assessment or other procedural document.

WQMC – Multiple Choice; set by the awarding organisation and administered and marked electronically. Learners will be able to answer multi-choice/multiple response questions using reference to appropriate industry normative or informative sources.

O/L – Online: a secure cloud-based assessment system (XAMS)

OP – Observed Performance; the assessment of a learner's performance by an approved assessor either in the learner's work place or at the approved centre or a location approved by the centre.

OQ – Oral Questions; oral questions may be asked by an assessor as part of a performance assessment or knowledge examination to confirm the understanding of the criteria by the learner.

PA – Performance Assessment; a performance assessment conducted either in the learner's work place or at the approved centre or a location approved by the centre.

RWE – Realistic Work Environment; an area at the approved centre or a location approved by the centre which replicates and has the features of a Work Place. The learner must not be permitted to be familiar with the simulated environment prior to undertaking assessment.

SR – Short Response questions.

WP – Work Place; is the naturally occurring environment in which the learner works, typically that would be in a customer's premise where work is being paid for by the customer.