



**Level 3 Award in
Requirements for Electrical
Installations BS7671: 2018
(2382-18)**

Version 1.0 (July 2018)

Qualification Handbook

Qualification at a glance

Subject area	Electrical Installation
City & Guilds number	2382
Age group approved	16-18, 19+
Assessment types	Multiple Choice
Approvals	Automatic Approval applies in certain cases
Support materials	Qualification handbook, SmartScreen
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Title and level	GLH	TQT	City & Guilds qualification number	Ofqual accreditation number
Level 3 Award in Requirements for Electrical Installations BS7671: 2018	35	40	2382-18	603/3319/4

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1 Introduction

This document tells you what you need to do to deliver the qualification:

Area	Description
Who is the qualification for?	This qualification is primarily aimed at practising electricians with relevant experience and other allied professionals e.g. surveyors, consultants and other trades needing to update and enhance their understanding of IET Wiring Regulations. It is also suitable for anyone wishing to demonstrate an understanding of the IET 18th Edition Wiring Regulations (BS 7671).
What does the qualification cover?	The IET Wiring Regulations (BS 7671) are the definitive standards for the electrical industry in respect of safe use and operation of electrical equipment and systems. They set requirements and operating criteria for the UK and correspond to EC standards and are recognised by the British Standards Institute as a British Standard (BS 7671). It is intended to ensure that individuals are conversant with the format, content and application of the Requirements for Electrical Installations BS 7671:2018.
What opportunities for progression are there?	It allows candidates to progress into employment or to the following City & Guilds qualifications: <ul style="list-style-type: none">• City & Guilds Level 2 Certificate in Fundamental Inspection, Testing and Initial Verification (2392-10)• City & Guilds Level 3 Certificate in Building Regulations for Electrical Installation Contractors In Dwellings (2393-10)• City & Guilds Level 3 Award in Initial Verification (2391-50)• City & Guilds Level 3 Award in the Periodic Inspection (2391-51)• City & Guilds Level 3 Award in Inspection and Testing (2391-52)• City & Guilds Level 4 Higher Professional Diploma in Building Services Engineering (4467-04)
Who did we develop the qualification with?	This qualification was developed by City & Guilds in conjunction with members of the electrical industry including NICEIC, ECA and is endorsed by Employers.

Structure

To achieve the Level 3 Award in Requirements for Electrical Installations BS7671: 2018 learners must achieve one mandatory unit.

City & Guilds unit number	Unit title
Mandatory	
602	Understand the requirements of electrical installations BS 7671 (2015)

Total Qualification Time

Total Qualification Time (TQT) is the number of notional hours which represents an estimate of the total amount of time that could reasonably be expected for a learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of a qualification.

TQT is comprised of the following two elements:

- 1) The number of hours which an awarding organisation has assigned to a qualification for Guided Learning, and
- 2) an estimate of the number of hours a Learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment, which takes place as directed by - but, unlike Guided Learning, not under the Immediate Guidance or Supervision of - a lecturer, supervisor, tutor or other, appropriate provider of education or training.

Title and level	GLH	TQT
Level 3 Award in Requirements for Electrical Installations BS7671: 2018	35	40

2 Centre requirements

Approval

If your Centre is approved to offer the qualifications:

- City & Guilds Level 3 Certificate in the Requirements of Electrical Installations to BS7671: 2008 (2382-10)
- Level 3 Certificate in the Requirements of Electrical Installations to BS7671: 2008 (2382-12)
- Level 3 Award In The Requirements for Electrical Installations BS7671: 2008 (2015) (2382-15)

you will be automatically approved to offer the Level 3 Award in Requirements for Electrical Installations BS7671:2018.

To offer this qualification, new centres will need to gain both centre and qualification approval. Please refer to the Centre Manual - Supporting Customer Excellence for further information.

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification before designing a course programme.

Resource requirements

Centre staffing

Approved centres must have effective quality assurance systems to ensure optimum delivery and assessment of qualifications. Quality assurance includes initial centre approval, qualification approval and the centre's own internal procedures for monitoring quality. Centres are responsible for internal quality assurance, and City & Guilds is responsible for external quality assurance.

External quality assurance for the qualification will be provided by City & Guilds external verification process. External verifiers are appointed by City & Guilds to approve centres, and to monitor the assessment and internal quality assurance carried out by centres. External verification is carried out to ensure that assessment is valid and reliable, and that there is good assessment practice in centres.

To carry out their quality assurance role, external verifiers must have appropriate occupational and verifying knowledge and expertise. City & Guilds external verifiers attend training and development designed to keep them up-to-date, facilitate standardisation between verifiers and share good practice.

External quality assurer (EQA)

The role of the EQA is to:

- provide advice and support to centre staff
- ensure the quality and consistency of assessments within and between centres by the use of systematic sampling
- provide feedback to centres and to City & Guilds.

Learner entry requirements

Candidates must not be entered for a qualification of the same type, content and level as that of a qualification they already hold.

There are no formal entry requirements for candidates undertaking this qualification. However, centres must ensure that candidates have the potential and opportunity to successfully gain the qualification.

It is expected that candidates will have basic knowledge of electrical science.

Age restrictions

This qualification is approved for candidates aged 16 or above.

3 Delivering the qualification

Initial assessment and induction

An initial assessment of each candidate should be made before the start of their programme to identify:

- if the candidate has any specific training needs
- support and guidance they may need when working towards their qualifications
- any units they have already completed, or credit they have accumulated which is relevant to the qualifications
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the candidate fully understands the requirements of the qualification[s], their responsibilities as a candidate, and the responsibilities of the centre. This information can be recorded on a learning contract.

Support materials

The primary publication associated with this qualification is the IET Wiring Regulations 18th Edition: BS 7671:2018 Requirements. This publication can be obtained from the IET at www.theiet.org from July 2nd 2018.

Candidates will require access to a copy of BS 7671 during the examination. The examination will be based upon this document only.

Centre staff must familiarise themselves with the structure, content and assessment requirements of the qualification before designing a course programme.

Centres may design course programmes of study in any way that:

- best meets the needs and capabilities of their candidates
- satisfies the requirements of the qualification.

This qualification specifically addresses the the IET Wiring Regulations 18th Edition: BS 7671:2018 and delivery methods must concentrate on this publication.

4 Assessment

Candidates must:

- successfully complete one multiple choice online test.

This is an open book assessment and learners will be allowed to take in the following permitted reference material

- IET Wiring Regulations 18th Edition: BS 7671:2018 Requirements

IET wiring regulations books taken into examinations can contain the following:

- Bookmarks (eg blank post-it notes, post-it notes numbered to indicate chapters or corners of pages folded)
- Highlighting of text

IET wiring regulations books taken into exams cannot contain the following:

- Sample exam questions, answers or diagrams
- Any writing in the regulations or accompanying written notes
- Notes, diagrams or any content that may in anyway advantage the candidate in answering questions within the exam.

It is the responsibility of the centre to ensure the material in the candidate's resources cannot unfairly advantage candidates in any way. If there is any doubt over the suitability of content the publication should not be used and replaced with 'clean' regulations.

Many centres may find it easier to continue using 'clean' regulations.

Candidates will also require a non-programmable calculator.

Test Specification

The way the knowledge is covered by this test is laid out in the table below:

Permitted Materials: IET Wiring Regulations 18th Edition: BS 7671:2018 Requirements

Graded: Pass/Fail

Pass Mark: The pass mark for this examination is set at approx. 60%

Test: 2382-602	Duration: 120 minutes		
Unit	Outcome	Number of questions	%
602	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.	10	17%
	8 Understand the information contained within the appendices of BS7671.	5	8%
	Total	60	100

5 Units

Structure of the units

These units each have the following:

- City & Guilds reference number
- Title
- Level
- Guided learning hours (GLH)
- Learning outcomes, which are comprised of a number of assessment criteria

Unit 602

Understand the requirements of electrical installations BS 7671:2018

Unit level:	Level 3
GLH:	35
Unit aim:	This unit gives the learner an understanding of the full content of BS6761, and how this applies to electrical installations within its scope.

Learning outcome

The learner will:

- 1 Understand the scope, object and fundamental principles of BS7671.

Assessment criteria

The learner can:

- 1.1 identify the scope of BS7671
- 1.2 identify the object of BS7671
- 1.3 identify the fundamental principles of BS7671.

Learning outcome

The learner will:

- 2 Understand the definitions used within BS7671.

Assessment criteria

The learner can:

- 2.1 interpret the definitions used within BS7671
- 2.2 relate the definitions to the regulations and appendices of BS7671.

Learning outcome

The learner will:

- 3 Understand how to assess the general characteristics of electrical installations.

Assessment criteria

The learner can:

- 3.1 interpret the requirements of assessing the general characteristics of electrical installations within the scope of BS767 including;
 - Chapter 31 Purpose, supplies and structure
 - Chapter 32 Classification of external influences
 - Chapter 33 Compatibility
 - Chapter 34 Maintainability.
 - Chapter 35 Safety services Chapter
 - Chapter 36 Continuity of service

Learning outcome

The learner will:

- 4 Understand requirements of protection for safety for electrical installations.

Assessment criteria

The learner can:

- 4.1 identify the requirements of protection for safety within the scope of BS7671 including;
 - Chapter 41 Electric shock
 - Chapter 42 Thermal effects
 - Chapter 43 Overcurrent
 - Chapter 44 Voltage disturbances and EMI
 - Chapter 46 Isolation and switching
- 4.2 interpret how this applies to electrical installations within the scope of BS7671 to include:
 - Protection against electric shock
 - Protection against thermal effects
 - Protection against overcurrent
 - Protection against voltage disturbances and electromagnetic disturbances
 - Isolation and switching

Learning outcome

The learner will:

- 5 Understand the requirements for selection and erection of equipment for electrical installations.

Assessment criteria

The learner can:

- 5.1 identify the requirements for selecting and erecting equipment and interpret how this applies to wiring systems
- 5.2 interpret how this applies to electrical installations within the scope of BS7671 to include:
 - Common rules
 - Wiring systems
 - Protection, isolation, switching, control and monitoring
 - Earthing arrangements and protective conductors
 - Other equipment
 - Safety services

Learning outcome

The learner will:

- 6 Understand the requirements of inspection and testing of electrical installations.

Assessment criteria

The learner can:

- 6.1 identify the requirements for inspection and testing
- 6.2 interpret how this applies to electrical installations including;
 - Chapter 64 Initial verification
 - Chapter 65 Periodic inspection and testing

Learning outcome

The learner will:

- 7 Understand the requirements of Special installations or locations as identified in BS 7671

Assessment criteria

The learner can:

- 7.1 identify the requirements for special installations including;
- Section 700 General
 - Section 701 Locations containing a bath or shower
 - Section 702 Swimming pools and other basins
 - Section 703 Rooms and cabins containing sauna heaters
 - Section 704 Construction and demolition site installations
 - Section 705 Agricultural and horticultural premises
 - Section 706 Conducting locations with restricted movement
 - Section 708 Electrical installations in caravan / camping parks and similar locations
 - Section 709 Marinas and similar locations
 - Section 710 Medical locations
 - Section 711 Exhibitions, shows and stands
 - Section 712 Solar photovoltaic (PV) power supply systems
 - Section 714 Outdoor lighting installations
 - Section 715 Extra-low voltage lighting installations
 - Section 717 Mobile or transportable units
 - Section 721 Electrical installations in caravans and motor caravans
 - Section 722 Electric vehicle charging installations
 - Section 729 Operating and maintenance gangways
 - Section 730 Onshore units of electrical connections for inland navigation vessels
 - Section 740 Temporary electrical installations for structures, amusement devices and booths at fairgrounds, amusement parks and circuses
 - Section 753 Heating cables and embedded heating systems
- 7.2 interpret how these effect the general requirements of the regulations.

Learning outcome

The learner will:

- 8 Understand the information contained within the appendices of BS7671.

Assessment criteria

The learner can:

- 8.1 identify the information in the appendices of BS7671.
- 8.2 specify how the information contained in the appendices is used to support electrical installation activities.

Appendix 1 Relationships to other qualifications

Links to other qualifications

Centres are responsible for checking the different requirements of all qualifications they are delivering and ensuring that candidates meet requirements of all units/qualifications.

Literacy, language, numeracy and ICT skills development

This [these] qualification[s] can develop skills that can be used in the following qualifications:

- Functional Skills (England) – see www.cityandguilds.com/functionalskills
- Essential Skills (Northern Ireland) – see www.cityandguilds.com/essentialskillsni
- Essential Skills Wales – see www.cityandguilds.com/esw

Appendix 2 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the Centres and Training Providers homepage on www.cityandguilds.com.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues.

Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

Our Quality Assurance Requirements encompasses all of the relevant requirements of key regulatory documents such as:

- SQA Awarding Body Criteria (2007)
- NVQ Code of Practice (2006)

and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

Access to Assessment & Qualifications provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information on such things as:

- **Walled Garden:** how to register and certificate candidates on line
- **Events:** dates and information on the latest Centre events
- **Online assessment:** how to register for e-assessments.

Centre Guide – Delivering International Qualifications contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification.

Specifically, the document includes sections on:

- The centre and qualification approval process and forms

- Assessment, verification and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Frequently asked questions.

Appendix 3 Useful contacts

UK learners General qualification information	E: learnersupport@cityandguilds.com
International learners General qualification information	E: intcg@cityandguilds.com
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	E: centresupport@cityandguilds.com
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	E: singlesubjects@cityandguilds.com
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	E: intops@cityandguilds.com
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e- assessment, Navigation, User/menu option, Problems	E: walledgarden@cityandguilds.com
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	E: business@cityandguilds.com

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City & Guilds Group

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