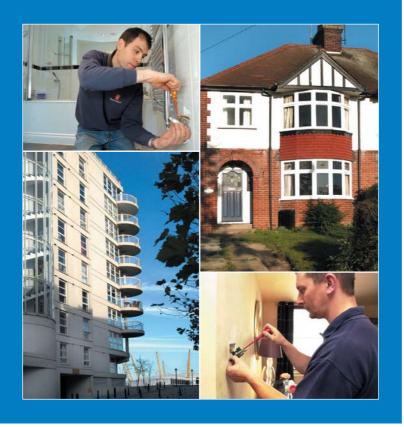
MAKING ELECTRICAL

Part P of the Building Regulations (2006 Edition) - Explained





Representing the best in electrical engineering and building services

Part P of the Building Regulations (2006 Edition) - Explained

Many electrical contractors and enterprises throughout the UK are asking themselves, "Does Part P of the Building Regulations apply to me?" Well, if you carry out or are associated with electrical installation work in dwellings situated within England and Wales, the answer to this question is certainly "Yes". If you want to avoid the complication and consequent costs of using Building Control to inspect your work, you are recommended to read on.

INTRODUCTION

Since 1 January 2005 electrical installation work carried out in dwellings in England and Wales was been subject to Part P of the Building Regulations.

Part P imposes the requirement that:

"Reasonable provision shall be made in the design, installation, inspection and testing of electrical installations in order to protect persons from fire or injury."

THESE REQUIREMENTS APPLY TO <u>ALL</u> ELECTRICAL INSTALLATION WORK CARRIED OUT IN DWELLINGS IN ENGLAND AND WALES. FAILURE TO MEET THESE REQUIREMENTS IS A CRIMINAL OFFENCE.

In addition, as a consequence of Part P, since 1 January 2005 electrical installation work in dwellings in England and Wales counts as "building work", as defined in the Building Regulations 2000, and hence should be notified to a Building Control Body before the work commences, unless:-

 the proposed work is to be undertaken by a Competent Person (an individual or a company authorised to self-certify compliance on completion of the work); or

2) the proposed work is of a minor nature.

Competent Person schemes are formally recognised by the Government as schemes whose members are adjudged sufficiently competent to self-certify that their work has been carried out in compliance with the Building Regulations.

Competent Persons for Part P are the firms that are responsible for carrying out the work. Of course, firms can be single-person entities, but they are not, for example, employees.



A firm wishing to join a Competent Person scheme is vetted to ensure it meets the respective scheme conditions including the relevant levels of competence. If it meets these conditions, it is classified as a "Competent Person" and its work is then not subject to inspection by Building Control bodies.

The Communities and Local Government (CLG) current criteria dictate that assessments should be carried out as required by the Electrotechnical Assessment Scheme (EAS) and that each scheme and certifying body should be accredited by UKAS to EN 45011.

The EAS scheme is published by the Institution of Electrical Engineers and a free copy of this scheme may be downloaded from the Institution of Engineering and Technology (IET) website www.theiet.org.



COMPETENT PERSON SCHEMES

Those wishing to join a Competent Person scheme will need to demonstrate their competence and, if necessary, may be required to undergo appropriate additional training. The on-site installation work of Competent Person scheme enterprises will be inspected at least once a year, as a requirement of their scheme provider.

Clients and specifiers in the past have generally specified that their electrical installation work should be undertaken by an ECA or NICEIC member. Since the 1st January 2005, clients and specifiers of fixed electrical installation work within dwellings have been able to specify that their electrical installation work is carried out by a Competent Person from any one of the following scheme providers.



BUILDING REGULATIONS

The members of Competent Person schemes that are able to self-certify their own work must have an appreciation of how the Building Regulations in general affect their electrical installation work and they need to be sufficiently competent to confirm that their work complies with all the applicable requirements of the Building Regulations, not just Part P.

Such requirements include, but are not limited to:-

- Part A (structure) depth of chases in walls and size of openings in joists or structural elements.
- Part B (fire safety) fire resistance of ceilings and walls including provision of fire alarm and detection systems.
- Part C (site preparation and resistance to moisture)

- moisture resistance of openings or penetrations for cables through external walls.
- Part E (resistance to the passage of sound) penetrations through ceilings and walls.
- Part F (ventilation) ventilation rates for areas within a dwelling.
- Part L (conservation of fuel and power) energy efficient lighting, effective controls including automatic controls.
- Part M (access to and use of buildings) heights of switches, socket-outlets, etc.
- Part P (electrical safety) fixed electrical installations in dwellings.

These Approved Documents may be downloaded free of charge from the Government website www.planningportal.gov.uk.



ENFORCEMENT

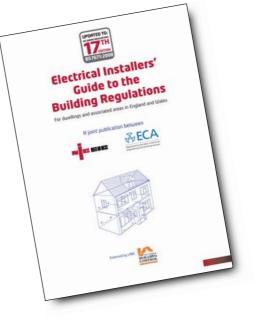
Failure to comply with the Building Regulations is a criminal offence and local authorities have the power to require the removal or alteration of completed work that does not comply with these requirements.

The person carrying out electrical work that contravenes the Building Regulations can be fined up to £5,000 for the contravention, and £50 each day the contravention continues. Householders may also encounter problems selling their property if work carried out does not comply with the Building Regulations. The householder is ultimately responsible for ensuring that all building work, including electrical work, complies with the Building Regulations.

SCOPE OF PART P

The scope of Part P applies to fixed electrical installations in buildings or parts of buildings comprising:

- Dwelling houses and flats;
- Dwellings and business premises that have a common supply - for example, shops and public houses with a flat above;



- Common access areas in blocks of flats, such as corridors and staircases (not lifts);
- Shared amenities of blocks of flats such as laundries and gymnasiums;
- Outbuildings such as sheds, detached garages and greenhouses served from a local dwelling, including garden electrics, external lighting and pond pumps, etc.

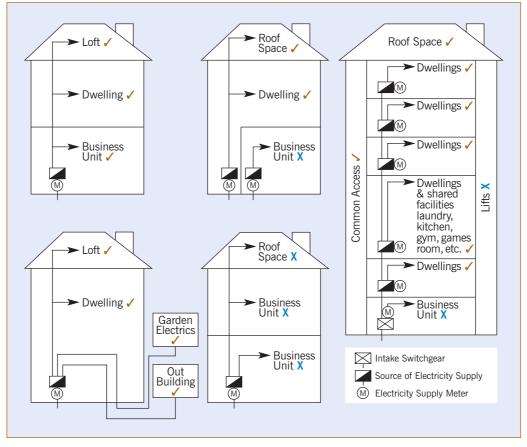
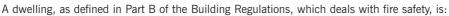


Figure 1 - The Scope of Part P



"A unit of residential accommodation occupied (whether or not as a sole or main residence) by a single person or by people living as a family, or by not more than six residents living together as a single household, including a household where care is provided for residents."



Places of employment and work places such as hotels and university campus student accommodation fall outside the scope of Part P. These types of buildings are, however, covered by the Electricity at Work Regulations and their electrical installations are required to comply with BS 7671, the IEE Wiring Regulations.

HOW TO COMPLY

The new Part P requirements, as taken from the Approved Document, are:

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PART P ELECTRICAL SAFETY

Design, installation, inspection and testing

P1. Reasonable provision shall be made in the design and installation of electrical installations in order to protect persons operating, maintaining or altering the installations from fire or injury.

Limits on application

The requirements of this Part apply only to electrical installations that are intended to operate at low or extra-low voltage and are-

- a) in or attached to a dwelling;
- b) in the common parts of a building serving one or more dwellings, but excluding power supplies to lifts;
- c) in a building that receives its electricity from a source located within or shared with a dwelling; and
- d) in a garden or in or on land associated with a building where the electricity is from a source located within or shared with a dwelling.

The objective of Part P is "to ensure that, on average, more fixed electrical installations in more dwellings comply more thoroughly with accepted safety standards during their service lives". The new safety requirements are applicable to alterations and additions to existing installations including rewires, as well as to new construction.

This new requirement of Part P will be met by complying with the "Fundamental Principles" for achieving safety as given in Chapter 13 of BS 7671, the IEE Wiring Regulations.

These fundamental principles can be achieved by following:

- the requirements of BS 7671: 2008; and
- the IEE On-Site Guide and IEE Guidance Notes 1 to 8
- ECA Guide to the Wiring Regulations BS 7671: 2008.

DEFINITIONS

In order to implement Part P, the definition of an Electrical Installation is key. The Approved Document P defines an electrical installation as:

Electrical installation is defined in BS 7671 as 'an assembly of associated electrical equipment supplied from a common origin to fulfil specific purposes. For the purposes of Building Regulations an electrical installation means fixed electrical cables or fixed electrical equipment located on the consumer's side of the electricity supply meter. **Extra-low voltage (ELV)** is defined in BS 7671 as not exceeding 50 V ac or 120 V ripple-free dc, whether between conductors or to earth.'

Low voltage (LV) is defined in BS 7671 as exceeding extra-low voltage but not exceeding 1000 V ac or 1500 V dc between conductors, or 600 V ac or 900 V dc between conductors and earth.'

IMPLEMENTATION

All new electrical installation work in dwellings needs to be notified to the local Building Control body before work commences, unless:-

• the proposed work is to be undertaken by a Competent Person (an individual or a

company authorised to self-certify compliance on completion of the work), or

• the proposed work is of a minor nature, i.e. it is non-notifiable and does not include the provision of a new circuit.

Note that replacement of a distribution board or consumer unit is notifiable work, it is not minor work.



Part P of the Building Regulations only applies to England and Wales. Scotland, Northern Ireland and the Isle of Man have their own Building Control systems. Details regarding the current requirements for electrical installations in both Scotland and Northern Ireland can be provided by the ECA or SELECT, if required.

EXAMPLES OF NOTIFIABLE AND NON-NOTIFIABLE WORK

The following table provides guidance as to whether some common items of work are notifiable to the Local Authority Building Control or not.

A company registered with a Part P self certification scheme provider is not required to notify Building Control prior to carrying out notifiable work. They are required however to notify their scheme provider on completion of the work.

A tick indicates that the work requires notification, a cross means that it does not. An appropriate BS7671 certificate must always be completed regardless of whether the work is notifiable or not.

Domestic location Where work is being carried out	Minor Works (Extensions & modification to circuits)	Major Works (New circuits)
Bathrooms	✓	✓
Bedrooms	×	 Image: A second s
Bedrooms containing a shower or bath	✓	✓
Ceiling (over head) heating	✓	✓
Communal area of flats	×	✓
Computer cabling not in a special location	×	×
Conservatories	×	✓
Dining rooms	×	✓
Extra low voltage (E.L.V.) non pre-assembled CE marked lights	1	1
Garden - lighting	✓	✓
Gardens - power	✓	 Image: A start of the start of
Greenhouses	×	 Image: A second s
Halls	×	 Image: A start of the start of
Integral garages	X	 Image: A start of the start of
Kitchen	✓	 Image: A start of the start of
Kitchen diners	✓	✓
Landings	×	 Image: A start of the start of
Lounge	×	✓
Remote buildings	×	✓
Remote garages	×	✓
Saunas	✓	 Image: A second s
Sheds	×	✓
Shower rooms	✓	✓
Small scale generators	✓	✓
Solar power systems	✓	✓
Stairways	×	✓
Studies	×	✓
Swimming pools	✓	✓
Telephone cabling not in a special location	×	×
TV rooms	X	✓
Under floor heating	✓	✓
Workshops (remote)	×	✓

NOTE: Special locations includes locations containing a bath, shower, swimming pool, paddling pool or hot air sauna.



EXTRA-LOW VOLTAGE ANCILLARY INSTALLATIONS

The extra-low voltage (ELV) category was included within Part P to cover extra-low voltage lighting installations, comprising downlighters, which have been known to be the cause of a number of house fires, for example, due to incorrectly sized conductors, sub-standard installations and breakdown at terminations.

ELV fixed electrical wiring for communication and information technology (IT), signalling, control and the like is "NON-NOTIFIABLE" work in kitchens, but is "NOTIFIABLE" in bathrooms and other special locations.



THE NOTIFICATION PROCESS

The Competent Person scheme operators (certification bodies) will generally issue the Certificate of Compliance to the householder or the person ordering the work, and give a copy of information recorded on the Certificate of Compliance to the relevant local Building Control Authority as a declaration of compliance with the Building Regulations 4 and 7.

Some scheme operators may place the onus on the Competent Person enterprise to issue the Certificate of Compliance to the person ordering the work.

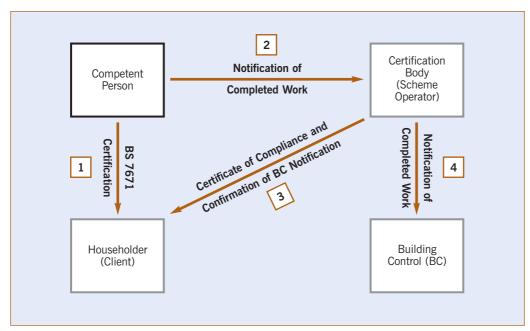


Figure 2 - Competent Person Scheme Notification Process (Typical)

- 1) The Competent Person will be required to issue BS 7671 certification (Electrical Installation Certificate or Minor Works Certificate) to the householder or the person ordering the work, as normal.
- 2) The Competent Person notifies his scheme provider/operator of work carried out upon completion of the work.
- The certification body/scheme operator issues Certificate of Compliance (with the Building Regulations 4 & 7) and confirmation of Building Control notification to the householder or person ordering the work.
- 4) The certification body/scheme operator issues notification of the completed work to Building Control for their records.

It must be remembered that Competent Persons that self-certify compliance with Part P for electrical safety will also have to certify compliance with all other relevant parts of the Building Regulations (detailed above) that have been affected by the electrical work that has been carried out.

DIY WORK OR NON-REGISTERED ENTERPRISES

Electrical DIY work is still permitted. Those doing notifiable DIY work have to submit a building notice to the local Building Control before work begins and will have to pay a Building Control fee to have their work inspected and tested for compliance with the Building Regulations.

DIY enthusiasts and enterprises not registered with one of the Competent Person scheme operators will be required to notify Building Control before starting work, by:-

- making a "full plans and specification application" and waiting for approval to start work; or
- giving a "building notice" before starting work.

Note that, on completion of the work, Building Control will normally expect a properly completed and signed BS7671 certificate to be produced, but may choose to carry out the inspection and testing itself or contract another body to carry out the work on it's behalf.

QUALIFIED SUPERVISOR

An enterprise seeking Competent Person status is required to have at least one Qualified Supervisor, i.e. someone who has direct responsibility on a day-to-day basis for the safety, quality and technical standard of the work, and ensures the results of the inspection, testing and verification process are accurately recorded on the appropriate forms for certification as required by BS 7671.

Depending on the volume of work undertaken and the geographical spread of a firm's operations, it may be the case that a single person cannot properly exercise the responsibility expected of Qualified Supervisors for the safety, quality and



technical standard of the work carried out. If that is the case, the firm will require more than one Qualified Supervisor.

A firm may be asked by an Assessor to justify the number of Qualified Supervisors it has in place. Since each firm may be different, it is not possible to give a specific answer at the start of the assessment process. Firms should be aware that an Assessor will apply the following test:

"Is the number of proposed Qualified Supervisors sufficient to safely support the firm's activities as a Competent Person given the composition, scale and geographical spread of its workload?"

Enterprises applying for Competent Person status are strongly advised to establish the appropriate number of Qualified Supervisors they require and ensure that each of them meets the required criteria.

Qualified Supervisors should have the appropriate knowledge and experience of the design, installation, testing, certification and reporting procedures for the electrical installation work within dwellings. In addition, they must be conversant with the following:

- The Electricity at Work Regulations 1989
- The current issue of BS 7671 (IEE Wiring Regulations)
- The applicable Building Regulations (not just Part P, but any other parts of the Building Regulations that may apply to a particular work activity)

Any individual who wishes to become a Qualified Supervisor under Part P must possess a qualification that referenced in detail the edition of the IEE Wiring Regulations current at the time the course was undertaken. This forms the essential underpinning knowledge required of a Qualified Supervisor.

QUALIFICATIONS

A Qualified Supervisor must also be able to meet each of the following criteria:

- Demonstrate to an Assessor an appropriate level of understanding of the practical and theoretical aspects BS 7671 (IEE 17th Edition Wiring Regulations), including knowledge and experience of design, installation, inspection, testing, certification and reporting procedures. This may be achieved through demonstration of practical skills, questions and answers or a combination of both; and
- demonstrate awareness and an understanding of the Building Regulations applicable to the type of domestic work the firm undertakes. A Competent Person is responsible for ensuring that the work the firm carries out complies

with all the applicable parts of the Building Regulations, not just Part P. This may be achieved through demonstration of practical skills, questions and answers or a combination of both.

Where an applicant for Qualified Supervisor status is unable to demonstrate competence in each of the criteria above, he or she is advised to undertake a suitable course in order to address their deficiency.

Examples of suitable qualifications:

This table is not exhaustive and others may be accepted after individual consideration.

NOTE: Certificates will be required for inspection by the assessor during the assessment process.



S/NVQ Level 3 in Installing and Commissioning Electrotechnical Systems and Equipment	EAL Level 3 Diploma in Requirements for Electrical Installations (BS7671: January 2008) VRQ		
NVQ Level 3 in Electrotechnical Services			
(Installation - Buildings and Structures)	City & Guilds A, B or C certificate		
A registered electrical apprenticeship	City & Guilds 236 Part 1, 2 or C certificate		
EAL Level 2 Certificate for Domestic Electrical	City & Guilds 2360 Part 1, 2 or C certificate		
Installers	City & Guilds 2356 Part 1 or 2		
City & Guilds 2380	City & Guilds 2391		
City & Guilds 2381	City & Guilds 2400		
City & Guilds 2382-10	SQA tailored award in Design and Verification of Electrical Installations		
City & Guilds 2382-20			
EAL Level 3 Diploma in Requirements for Electrical Installations (BS7671: January 2008) Update VRQ	Note: By 2010, all Part P qualified supervisors for Part P registered Competent Person schemes will be required to evidence their qualification to the 17th edition.		

If an applicant's qualification referenced in detail the edition of the IEE Wiring Regulations current at the time the course was undertaken, but is not listed above, contact the ECA Education and Training department **via fax** (020 7221 7344) or **in writing** to *Education & Training Department, ECA, ESCA House, 34 Palace Court, London W2 4HY* with the following information for further advice:

- Applicant's name, address, e-mail address and telephone number
- A COPY of the qualification certificate
- Details of the place of study
- Supporting information demonstrating how the qualification referenced the specified criteria.

COMPETENT PERSON COSTS

The process of becoming a Competent Person and subsequently operating as a Competent Person will entail costs. The application, assessment and initial registration of a Competent Person provide the most obvious and immediate example of this, but there are other costs, some of which will be borne by the Competent Person enterprise and some of which will be directly charged to the customers or persons ordering the work. The table below summarises the main cost activities that are involved:

- a. Application, Initial Assessment & Registration
- b. Annual Surveillance
- c. Certification
- d. Notification
- e. Warranty Cover
- f. Complaints Process

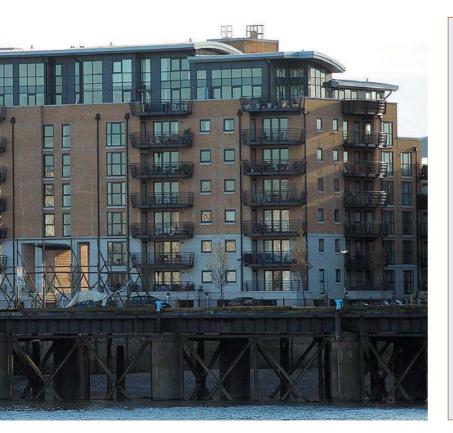
- Applicants to Competent Person scheme providers will be charged a fee for the initial assessment and registration process as required by the scheme provider's arrangements.
- b. The UKAS EN 45011 accredited status and the requirements imposed by Government as a condition of approving self-certification schemes require the annual surveillance of the installation work of registered firms (Competent Persons).
- c. Registered Competent Persons are required to comply with BS 7671. This includes complying with the certification requirements set out in this standard. Firms are advised to use the model forms set out in BS 7671, copies of which can be freely downloaded from the Institution of Electrical Engineers (IEE) website www.theiet.org or, as appropriate, forms based on the model forms, i.e. ECA, ELECSA, NICEIC, etc.
- d. Competent Person schemes are required by Government to provide the relevant local authorities with information about the work carried out by their registered members. In order to be able to do this, registered firms will be required to tell their scheme operator, e.g. ELECSA, about the work they have done, the address of the dwelling in which it was carried out, and the date of completion of the work. This must be done for each job carried out by a Competent Person that is in-scope to

Part P of the Building Regulations. The scheme providers will levy a charge per job to carry out the necessary notification - this will include sending customers a Building Regulations compliance certificate. This charge will be levied on Competent Persons, and they in turn, if they so choose, can separately itemise this cost in their quotation to their customer, e.g. "Notification to Local Authority & Provision of Compliance Certification".

e. Competent Person schemes are required by Government to "make arrangements such that all customers (persons ordering the work) of scheme members have an opportunity to purchase an insurance-backed warranty as a minimum against noncompliance of work with the Building Regulations".

Competent Persons are required to offer the householder or person ordering the work the opportunity to purchase the guarantee/warranty against non-compliance of electrical installation work with the Building Regulations. However, uptake of the offer is optional and not compulsory.

f. The costs of complaint management process and investigation may be absorbed in the costs of the initial assessment and subsequent surveillance for some providers. Others, however, may require an additional charge for this service to be provided.



ADDITIONAL INFORMATION

Further information regarding Part P of the Building Regulations can be found and downloaded free of charge from the following websites:

www.partp.co.uk

www.communities.gov.uk

www.eca.co.uk

www.elecsa.co.uk

ECA Contact Numbers:

General Enquiry on Part P -0870 609 6093

Education & Training Enquiry on Part P -020 7313 4846

YOUR FREQUENTLY ASKED QUESTIONS ANSWERED

- 1) Q. To gain Part P certification, do I have to be trading for at least 12 months?
 - A. No. You need to be qualified and also have ongoing or completed work available for inspection by the assessor.
- 2) Q. I've heard that Part P only applies to electrical work which has to be notified to Building Control. Is this correct?
 - A. No. The requirements of Part P apply to all electrical installation work.
- 3) Q. Do I need to be NICEIC approved or an ECA member to become Part P certified?
 - A. No, but these organisations can bring business, financial and technical benefits to your firm.
- 4) Q. I work for myself and don't employ anyone else. Can I still apply for self-certification?
 - A. Yes. Sole traders can be registered for Part P.
- 5) Q. I only carry out minor electrical work in dwellings, e.g. repairs and replacements, installing extra points. Do I need to be Part P certified?
 - A. No provided you keep within the scope of what constitutes nonnotifiable work, as stated in Approved Document P, which is very limiting. However, all minor work should comply with BS 7671 and be certificated by the issue of a Minor Works Certificate to the householder or person ordering the work.

6) Q. Is PAT Testing covered by Part P?

- A. No. Part P is concerned only with the fixed electrical installations of dwellings.
- 7) Q. My firm's work is largely commercial/ industrial, with only the occasional domestic job. Must we be Part P certified?
 - A. For limited domestic activity, it is a business decision to either gain Part P certification or notify this work to Building Control before the work commences, on a job-by-job basis.

8) Q. Is it true that BS 7671 is mandatory under Part P?

A. No. BS 7671 requirements are non-statutory and will remain so. Having said that, however, meeting the fundamental principles for safety given in BS 7671 will be an appropriate means to achieve compliance with Part P requirements.

9) Q. Can a Part P registered Competent Person certify other electricians' work?

A. Part P Competent Person certification is for self-certification of the firm's work. A Competent Person may, however, wish to offer his services to Local Authority Building Control to carry out inspections on their behalf

10) Q. Does Part P apply to university or boarding school student accommodation?

A. Not to accommodation blocks on campus and maintained by university or school-employed staff; these are subject to the HSW Act/Electricity at Work Regulations. However, houses offcampus are treated the same as other dwellings and are subject to Part P compliance.

11) Q. Are wholesalers and shops prevented from selling electrical goods to the general public?

A. No, because DIY electrical work will still be permitted.

12) Q. I carry out only periodic inspection and testing. Do I require Part P certification?

A. The Part P Competent Person schemes relate to self-certification of installation work by the installer, so they are not relevant to periodic inspection and testing. Those carrying out such work need, of course, to be competent to undertake this activity and report to the client (householder) any unsafe aspects of their installation.





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