



***Minimum Technical
Competence of Enterprises that undertake Electrical
Installation Work in Dwellings***

September 2005

1. Scope

This document sets out the criteria to be used by a body offering a Part P self-certification scheme listed by Government in Schedule 2A of the Building Regulations 2000, as amended, in assessing technical competence and the capability of an enterprise to undertake electrical installation work in dwellings prior to registration.

The document defines the requirements in relation to two levels of activity for enterprises:

Level A: The requirements for an enterprise the scope of whose work includes the design, installation, inspection and testing of electrical installation work that is associated with dwellings and is intended to operate at low or extra-low voltage

Level B: The requirements for an enterprise the scope of whose work is limited to the design, installation, inspection and testing of defined electrical installation work that is associated with dwellings, is intended to operate at low or extra-low voltage, and is undertaken in connection with, or ancillary to some other work.

Note: Annex 6 provides an indicative list of work in connection with which electrical work in dwellings may be carried out.

2. Definitions

Assessed Enterprise = an enterprise which has been assessed in accordance with the requirements of this document as competent, and which possesses a current Assessment Certificate.

Competent person scheme operator = a body offering a Part P self-certification scheme meeting the requirements of this document and listed by Government in Schedule 2A of the Building Regulations 2000, as amended

BS 7671 = Current edition including all amendments.

Building Regulations = In England and Wales, the Building Act 1984 (as amended) and all subsequent Building Regulations (Amendment) Regulations.

Competent = in possession of the necessary technical knowledge, skill and experience for the nature of the electrical work undertaken and ability to prevent danger or where appropriate injury.

Directly engaged = carrying out electrical installation work in dwellings, including the design, installation, inspection, testing and certification of that work in accordance with the requirements of BS 7671.

Dwelling – includes a dwelling house or flat.

Electrical installation work - the design, installation, inspection and testing of electrical equipment as a system or part of a system.

Defined Electrical installation work - electrical installation work associated with specified non electrical work and whose scope is defined by the competent person scheme operator.

Electrical installation work in dwellings = work on electrical installations, carried out by, and under the direct control and supervision of, an Enterprise, intended to operate at low voltage or extra-low voltage, in dwellings, in common parts of buildings serving one or more dwellings other than power supplies to lifts, buildings which receive their electricity from a source located within or shared with a dwelling, or in

gardens or in or on land associated with buildings where the electricity is from sources located within or shared with dwellings. It excludes reporting on the condition of existing electrical installations.

Enterprise – each address and trading title of a sole trader, partnership, private limited company, public limited company, public body or other legal entity.

Flat - a separate and self contained premises constructed or adapted for use for residential purposes and forming part of a building from some other part from which it is divided horizontally.

Functionality - the ability of a completed installation to operate as required.

Principal = head of the enterprise, eg. sole trader, partner of a partnership, managing director, etc.

Principal Duty Holder = the person appointed by the enterprise to have responsibility for the maintenance of the overall standard and safety of the electrical installation work in dwellings.

Qualified Supervisor =in respect of a Level A Enterprise, a competent person with specific responsibility on a day-to-day basis for the safety, technical standard and quality of electrical installation work in dwellings.

Responsible Person = in respect of a Level B Enterprise, a competent person with specific responsibility on a day-to-day basis for the safety, technical standard and quality of electrical installation work in dwellings.

Sub-letting = engaging another enterprise or individual to carry out domestic electrical installation work (Note: employing staff on a labour-only basis is not sub-letting).

Level A: REQUIREMENTS RELATING TO THE COMPETENCE OF AN ENTERPRISE TO DESIGN, INSTALL, INSPECT AND TEST FIXED ELECTRICAL INSTALLATIONS IN DWELLINGS.

A1. Electrical Installation Work

- A1.1 The enterprise shall be directly engaged in carrying out electrical installation work in dwellings.
- A1.2 The electrical installation work in dwellings shall be carried out in compliance with the relevant technical reference documents (see Annex 1).
- A1.3 An assessed enterprise shall not sub-let electrical installation work in dwellings unless the work is undertaken by an enterprise that is registered with a Competent Person Scheme Operator.
- A1.4 Competence of the enterprise will not be assessed on electrical installation work sub-let to others; however the assessed enterprise will retain responsibility for this work.

A2. Technical Reference Documents

- A2.1 The enterprise shall have current editions, including all amendments, of the documents listed in Annex 1.

A3. Test Instruments

- A3.1 The enterprise shall have an adequate number of serviceable test instruments and test leads appropriate to the range, scale and geographical spread of its electrical installation work in dwellings. As a minimum the enterprise shall have instruments and leads to enable the tests detailed in Annex 2 to be carried out.
- A3.2 The enterprise shall have a suitable system in place to ensure that all test instruments used for the certification of electrical installation work in dwellings, whether owned or hired by the enterprise are accurate and consistent (see Annex 3).
- A3.3 The assessed enterprise shall hold records demonstrating the accuracy and consistency of test instruments used for certification of electrical installation work in dwellings for a minimum of three years.

A4. Certification and Reporting

- A4.1 The enterprise shall issue the appropriate electrical installation certificates in accordance with the relevant standards (see Annex 1) for all the electrical installation work in dwellings that it carries out.
- A4.2 The assessed enterprise shall issue the appropriate Building Regulations compliance certificates in accordance with the relevant standards and regulations (see Annex 1) for all the electrical installation work in dwellings that it carries out.
- A4.3 The assessed enterprise shall hold copies of all the certificates that it has issued for electrical installation work in dwellings for at least three years.

A5. Personnel

- A5.1 The enterprise shall employ persons to carry out electrical installation work in dwellings who are competent and/or adequately supervised to ensure safety during and on completion of the work.
- A5.2 The enterprise shall appoint an individual to be the Principal Duty Holder. In addition, the enterprise shall appoint as Qualified Supervisors as many individuals as necessary to ensure all electrical installation work in dwellings is under the supervision of a Qualified Supervisor. The Principal Duty Holder may also be a Qualified Supervisor.
- A5.3 The Principal Duty Holders hold responsibilities detailed in A5.5.
- A5.4 Qualified Supervisors hold responsibilities detailed in A5.6, and shall meet the requirements set out in A5.7.

A5.5 Responsibilities of the Principal Duty Holder:

- A5.5.1 To ensure that the enterprise carries out all electrical installation work in dwellings in accordance with the relevant standards, including the issue of certification, and;
- A5.5.2 to ensure that the enterprise carries out all electrical installation work in dwellings in compliance with all relevant statutory requirements, including the issue of certification, and;
- A5.5.3 have an understanding of, and be responsible for the health and safety and other statutory requirements relating to electrical installation work in dwellings carried out by the enterprise, and;
- A5.5.4 to ensure that all electrical installation work in dwellings is allocated to the enterprise's Qualified Supervisor(s).
- A5.5.5 to ensure personnel receive any necessary training

A5.6 Responsibilities of a Qualified Supervisor:

- A5.6.1 The safety, quality and technical standard on a day-to-day basis of the electrical installation work in dwellings allocated to him/her.
- A 5.6.2 Ensuring compliance of the electrical installation work with the relevant requirements of the Building Regulations.
- A 5.6.3 Ensuring that the results of the inspection and testing are accurately recorded on the appropriate forms of certification, and;
- A 5.6.4 Verifying and authenticating certification showing compliance with Building Regulations.

A5.7 Requirements for a Qualified Supervisor

A Qualified Supervisor shall:

A5.7.1 have adequate knowledge, experience and understanding of the design, installation, inspection and testing procedures for electrical installation work in dwellings in accordance with BS7671 for each of the relevant competence requirements set out in Annex 4 and;

A5.7.2 demonstrate successful completion of formal training with relevant qualifications or equivalent (see annex 5) or be assessed to the satisfaction of the Competent Person Scheme Operator as having knowledge and understanding in respect of each of the competences identified in Annex 4 as appropriate for a Level A enterprise.

Note to 5.7.2: An off-site assessment of competence to the applicable criteria listed in Annex 4 is acceptable provided that this is certificated either (a) by, or on behalf of, a Competent Persons Scheme Operator authorised by ODPM and modelled on ISO17024 (personnel certification) or (b) by a certification body accredited for this purpose by UKAS to ISO17024

A6. Insurance

A6.1 The enterprise shall hold at least £2 million of public liability insurance covering all the work it carries out in dwellings.

A7. Complaints

A7.1 The assessed enterprise shall maintain a record of all complaints received over at least the previous three years, concerning the compliance with Building Regulations of the electrical installation work it has carried out in dwellings, together with the details of the actions taken to resolve these complaints.

A8. Health and Safety

A8.1 The enterprise shall have a written health and safety policy statement where required by law, and shall carry out risk assessments as appropriate.

A9. Records

In addition to those records detailed previously, the assessed enterprise shall also hold for at least three years:

A9.1 specifications, drawings and certificates relating to electrical installation work in dwellings, carried out and in progress.

A9.2 a list of all electrical installation work carried out in dwellings.

Level B: REQUIREMENTS RELATING TO THE COMPETENCE OF AN ENTERPRISE TO UNDERTAKE DEFINED ELECTRICAL INSTALLATION WORK IN DWELLINGS IN CONNECTION WITH, OR ANCILLARY TO, SOME OTHER NON-ELECTRICAL WORK.

B1. Defined Electrical Installation Work

- B1.1 The enterprise shall be directly engaged in carrying out defined electrical installation work in dwellings.
- B1.2 The electrical installation work in dwellings shall be carried out in compliance with the relevant technical reference documents (see Annex 1).
- B1.3 An assessed enterprise shall not sub-let electrical installation work in dwellings unless the work is undertaken by an enterprise that is appropriately registered with a Competent Person Scheme Operator.
- B1.4 Competence of the enterprise will not be assessed on electrical installation work sub-let to others; however the assessed enterprise will retain responsibility for this work.
- B1.5 Defined electrical installation work is electrical work that is provided solely within the scope of electrical installation work defined for the enterprise.

B2. Technical Reference Documents

- B2.1 The enterprise shall have current editions, including all amendments, of the documents listed in Annex 1.

B3. Test Instruments

- B3.1 The enterprise shall have an adequate number of serviceable test instruments and test leads appropriate to the range, scale and geographical spread of its defined electrical installation work in dwellings. The enterprise shall have instruments and leads to enable the relevant tests detailed in Annex 2 to be carried out.
- B3.2 The enterprise shall have a suitable system in place to ensure that all test instruments used for the certification of electrical installation work in dwellings, whether owned or hired by the enterprise are accurate and consistent (see Annex 3).
- B3.3 The assessed enterprise shall hold records demonstrating the accuracy and consistency of test instruments used for certification of electrical installation work in dwellings for a minimum of three years.

B4. Certification and Reporting

- B4.1 The enterprise shall issue the appropriate electrical installation certificates in accordance with the relevant standards and regulations (see Annex 1) for all the electrical installation work in dwellings that it carries out.
- B4.2 The assessed enterprise shall issue the appropriate Building Regulations compliance certificates in accordance with the relevant standards and regulations (see Annex 1) for all the electrical installation work in dwellings that it carries out.
- B4.3 The assessed enterprise shall hold copies of all the certificates that it has issued for electrical installation work in dwellings for at least three years.

B5. Personnel

- B5.1 The enterprise shall employ persons to carry out electrical installation work in dwellings who are competent and/or adequately supervised to ensure safety during and on completion of the work.
- B5.2 The enterprise shall appoint an individual to be the Principal Duty Holder. In addition, the enterprise shall appoint as Responsible Persons as many individuals as necessary to ensure all electrical installation work in dwellings is carried out by or under the supervision of a Responsible Person. The Principal Duty Holder may also be a Responsible Person.
- B5.3 The Principal Duty Holders hold responsibilities detailed in B5.5.
- B5.4 Responsible Persons hold responsibilities detailed in B5.6, and shall meet the requirements set out in B5.7.

B5.5 Responsibilities of the Principal Duty Holder:

- B5.5.1 To ensure that the enterprise carries out all electrical installation work in dwellings in accordance with the relevant standards, including the issue of certification, and;
- B5.5.2 to ensure that the enterprise carries out all electrical installation work in dwellings in compliance with all relevant statutory requirements, including the issue of certification, and;
- B5.5.3 have an understanding of, and be responsible for the health and safety and other statutory requirements relating to electrical installation work in dwellings carried out by the enterprise, and;
- B5.5.4 to ensure that all electrical installation work in dwellings is allocated to the enterprise's Responsible Person(s).
- B5.5.5 to ensure that electrical installation work in dwellings that goes beyond the enterprise's defined scope of electrical installation work, as described in the scope, is referred back to the customer for execution by an enterprise that has the necessary scope.

B5.6 Responsibilities of a Responsible Person:

- B5.6.1 The safety, quality and technical standard on a day-to-day basis of the electrical installation work in dwellings allocated to him/her (or where appropriate other persons under his supervision), by the Principal Duty Holder
- B 5.6.2 Ensuring compliance of the electrical installation work with the relevant requirements of the Building Regulations.
- B5.6.3 Ensuring that the results of the inspection and testing are accurately recorded on the appropriate forms of certification.
- B5.6.4 Verifying and authenticating certification showing compliance with Building Regulations, and;

B5.7 Requirements for a Responsible Person

A responsible person shall:

B5.7.1 have adequate knowledge, experience and understanding of the design, installation, inspection and testing procedures for electrical installation work in dwellings in accordance with BS7671 for each of the relevant competence requirements set out in Annex 4, and;

B5.7.2 demonstrate successful completion of formal training with relevant qualifications or equivalent (see annex 5) or be assessed to the satisfaction of the Competent Person Scheme Operator as having knowledge and understanding in respect of each of the competences identified in Annex 4 as appropriate to the relevant scope of electrical installation work undertaken by the enterprise.

Note to 5.7.2: An off-site assessment of competence to the applicable criteria listed in Annex 4 is acceptable provided that this is certificated either (a) by, or on behalf of, a Competent Persons Scheme Operator authorised by ODPM and modelled on ISO17024 (personnel certification) or (b) by a certification body accredited for this purpose by UKAS to ISO17024

B6. Insurance

B6.1 The enterprise shall hold at least £2 million of public liability insurance covering all the work it carries out in dwellings.

B7. Complaints

B7.1 The enterprise shall maintain a record of all complaints received over at least the previous three years, concerning the compliance with Building Regulations of the electrical installation work it has carried out in dwellings, together with the details of the actions taken to resolve these complaints.

B8. Health and Safety

B8.1 The enterprise shall have a written health and safety policy statement where required by law and shall carry out risk assessments as appropriate.

B9. Records

In addition to those records detailed previously, the assessed enterprise shall also hold for at least three years:

B9.1 specifications, drawings and certificates relating to electrical installation work in dwellings, carried out and in progress.

B9.2 a list of all electrical installation work carried out in dwellings.

Annex 1

TECHNICAL REFERENCE DOCUMENTS

Minimum Requirement Relative to Assessed Level of Enterprise:

Technical Reference Document	Level A	Level B
BS 7671: Requirements for Electrical Installations	Yes	Not essential
IEE On-Site Guide to BS 7671: 16 th Edition Wiring Regulations or equivalent.	Not essential	Yes
HS(R)25 Memorandum of Guidance on the Electricity at Work Regulations	Yes	Yes
Building Regulations, Approved Document P.	Yes	Yes

Annex 2

TESTING

Test instruments and suitable leads are required for Level A Enterprises to carry out the tests in the table below to comply with clause A 3.1.

For Level B Enterprises test instruments and suitable leads are required to carry out the relevant tests in relation to the defined electrical installation work of the Enterprise to comply with Clause B 3.1

Test
Voltage measurement
Insulation resistance measurement
Continuity
Polarity
Measurement of earth fault loop impedance of circuits
Measurement of external earth fault loop impedance
Operation of Residual current devices

TEST INSTRUMENTS – CALIBRATION REQUIREMENTS

The Enterprise shall have a suitable system in place to ensure that the accuracy and consistency of all test instruments used for certification and reporting purposes is being maintained.

There are a number of alternatives for such control systems, including:

- Maintaining records of the formal calibration/re-calibration of test instruments as recommended by the instrument manufacturers, supported by calibration certificates issued by recognised organisations with measurements traceable to national standards. Certificates issued by UKAS accredited laboratories are preferable.
- Maintaining records over time of comparative crosschecks with other test instruments used by the Electrical Contractor.
- Maintaining records over time of measurements of the characteristics of designated reference circuits or devices. For example, the consistency of continuity, insulation resistance and earth electrode test instruments could be checked against a proprietary resistance box or a set of suitable resistors. Earth fault loop impedance test instruments could be checked by carrying out tests on a designated socket-outlet (on a non-RCD protected circuit) in the contractor's office. RCD test instruments could be checked by carrying out tests on an RCD unit plugged into the designated socket-outlet.

Voltage indicating equipment does not require calibration.

TECHNICAL COMPETENCE REQUIREMENTS RELATIVE TO ASSESSED LEVEL OF THE ENTERPRISE

Note: The Assessment Process is required to ensure that the knowledge, understanding and experience available to each Enterprise is appropriate for the Level and Scope of electrical installation work being assessed in respect of each of the relevant competences listed below

No	Technical Competence	Level A Qualified Supervisor	Level B Responsible Person
1.	Applicable Building Regulations	Yes	Yes
2.	Electrical Safety legislation, regulations, standards and terminology: 2.1 Fundamental Principles 2.2 Construction Design and management 2.3 Electrical Safety in Construction	Yes Yes Yes	Yes Where relevant Where relevant
3.	Pre-work survey/inspection: 3.1 Rationale for alterations to circuits & Adequacy for load increase 3.2 Three Phase requirements 3.3 Additional criteria for New Works	Yes Yes Yes	Yes Where relevant Where relevant
4.	Safe isolation procedures	Yes	Yes
5.	Identification of unsafe electrical situations - including documentation procedures following unsafe situation	Yes	Yes
6.	Earthing and bonding requirements - including earthing System Types	Yes	Yes
7.	Electrical test procedures	Yes	Yes
8.	Cable and component selection 8.1 compliance with standards & Conventional final circuits cables 8.2 new circuits	Yes Yes	Yes Where relevant
9.	Installation and replacement of electrical components	Yes	Yes

No	Technical Competence	Level A Qualified Supervisor	Level B Responsible Person
10.	Checking the correct and safe operation of installed electrical components – including Inspection Check List	Yes	Yes
11.	Recording of electrical test results and completion of certification 11.1 Certification for new circuits	Yes Yes	Yes Where relevant
12.	Installing and/or rerouting cables 12.1 External cabling & Safe Zones	Yes Yes	Where relevant Where relevant
13.	Special Locations: 13.1 Locations containing a bath or a shower 13.2 Shower cubicles in a room used for other purposes 13.3 Garden Buildings, Domestic Garages and External Equipment 13.4 Earthing requirements of equipment having high protective conductor current	Yes Yes Yes Yes	Where relevant Where relevant Where relevant Where relevant
14.	New circuit requirements	Yes	Where relevant
15.	Lighting installations	Yes	Where relevant
16.	Maintenance	Yes	Where relevant
17.	3-phase Supplies	Yes	Where relevant

Level B: The electrical installation work covered by this level will be only in connection with, or ancillary to, some other non-electrical work and be within the scope defined for the enterprise by the Competent Person Scheme Operator .

Reference Documents: The assessment of competence is based on the following documents: -

- HSE Memorandum of guidance on The Electricity at work Regulations (HSR 25);
- Building Regulations Approved Document P;
- British Standard 7671:2001;
- IEE On-Site Guide to BS7671:2001 or equivalent.
- Cable, component and fitting manufacturers Installation and Testing Instructions where relevant
- IEE Guidance Notes 1 – 7 or equivalent.

Annex 5

RELEVANT QUALIFICATIONS

City & Guilds 2360 Part 2 (Electrical Installation Competencies), passed in 1993 or after

City & Guilds 2380 (16th Edition) Certificate

City & Guilds 2381

City & Guilds 2391

City and Guilds 2400

EAL Domestic Electrical Installer Qualification

NVQ/SVQ level 3 in installing and commissioning electro technical systems and equipment awarded in 1993 or after

The Scottish Qualification Authority Tailored Award in Design and Verification of Electrical Installation

An equivalent qualification

Note: At the discretion of the Competent Person Scheme Operator a Qualification to an earlier edition of The Wiring Regulations may be:

- accepted as an entry qualification provided it is updated to one of the qualifications listed above within such period, not exceeding 18 months, prescribed by the Competent Person Scheme Operator, and/or
- accepted as an entry qualification provided it is augmented by other training prescribed by the Competent Person Scheme Operator, and/or
- accepted as an entry qualification provided it is augmented by additional assessment to the satisfaction of the Competent Person Scheme Operator.

EXAMPLES OF WORK in connection with which electrical work in dwellings is carried out

Plumbing;
Gas installation work;
Installation of oil-fired combustion appliances;
Installation of solid fuel burning combustion appliances;
Installation or refurbishment of kitchens, bathrooms or bedrooms;
Stair-lift installation work;
Loft conversions;
Air conditioning installation work;
Building extensions;
Building conservatories;
Installation of domestic extractor fans;
Installation of security systems;
Installation of telecommunications systems;
Installation of door or gate entry systems;
CCTV systems;
Property maintenance.
Spa bath installations
Swimming pool installations