



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

February 2006

Replaces 05-046 Sept 05 and 05-010 March05

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

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. For Level A enterprises all elements of the six competences are to be assessed. For level B enterprises the relevant elements of all six competences are to be assessed.

These competences are taken from “The National Occupational Standard for ensuring the compliance of electrical installation work in dwellings in accordance with the Building Regulations (England and Wales)” published by Summit Skills.

Competence 1: IMPLEMENT SAFE SITE WORKING PRACTICES WHEN WORKING IN DWELLINGS

Understanding and Experience	Knowledge
<ol style="list-style-type: none"> 1. Confirm that the site is safe to start work 2. Monitor regularly that the working conditions remain safe for work to occur 3. Check that warning notices and barriers to prevent unauthorised entry are installed in suitable positions 4. Confirm a programme of work which is safe and practical in accordance with the identified category of electrical installation work to be undertaken 5. Identify when it is appropriate to use approved access equipment on the work site 6. Ensure that the access equipment is operated correctly and according to suppliers' instructions 7. Check that on completion of work all tools, equipment and materials on site are removed, and stored safely and securely 8. Check the work site is cleared after the work ends and is left in a safe and satisfactory condition in accordance with health and safety regulations and good housekeeping practice 	<ol style="list-style-type: none"> 1. Know and understand the following aspects relating to Health and Safety: <ol style="list-style-type: none"> (a) The regulatory requirements for correctly storing tools, equipment and materials (b) The regulatory requirements for using approved access equipment (c) When a work site is safe for work to proceed or to leave when work finishes (d) The legal responsibilities for health and safety as appropriate to site working including the Health and Safety at Work Act, the Electricity At Work Regulations and COSH (e) The need for safety, welfare and access arrangements to be in force at the site (f) Use, care and storage of substances covered by COSHH 2. Know and understand the following aspects relating to Working on site: <ul style="list-style-type: none"> - The importance of “housekeeping” procedures in relation to site working - The importance of following correct procedures to minimise damage to property, fabric and equipment. - The implication/impact of the Building Regulations on safe site working

Competence 2: DESIGN THE POSITION, FIX AND FIT ELECTRICAL WIRING SYSTEMS, WIRING ENCLOSURES & EQUIPMENT IN DWELLINGS IN ACCORDNACE WITH BUILDING REGULATIONS

Understanding and Experience	Knowledge
<ol style="list-style-type: none"> 1. Confirm authorisation to start work in accordance with accepted industrial practices and procedures, including where necessary relevant personnel has been administered 2. Confirm before work starts that the building structure and fabric has been checked for risks to health and safety and the work to be carried out will not cause damage to the structure or fabric of the dwelling 3. Endorse at the outset, that the installation design and plans for positioning and fixing the identified wiring systems, wiring enclosures, electrical equipment and accessories meet the specification 4. Identify any variances in the working conditions, which might impact on the work to take place and comply with the approved procedures for reporting, recording and taking corrective action. 5. Identify whether or not the appropriate tools and equipment to carry out the work are safe and fit for purpose. 6. Identify that the wiring systems, wiring enclosures, electrical equipment and accessories are of the right type, fit for purpose in accordance with the electrical installation's design and specification and suitable for the working environment 7. Identify that fixings and fitting methods are fit for purpose and appropriate for the site structure and building fabric, and meet the requirements of the specification <ol style="list-style-type: none"> 8. Confirm that all appropriate manufacturers' instructions in the use and preparation of wiring systems, wiring enclosures, electrical equipment and accessories have being adhered to 9. Liaise with, as appropriate, all technical and non-technical persons visiting or present at the site in a professional manner. 	<p>Know and understand the principles relevant to:</p> <ul style="list-style-type: none"> - The plans for the electrical installation work installation and what is required - The common types, their advantages and limitations of wiring systems, wiring enclosures, electrical equipment and accessories - The materials which are recommended for use as electrical conductors - Determining sizes, types and quantities of wiring systems, wiring enclosures, electrical equipment and accessories and insulators - The importance of having a schedule of quantities of all materials for the electrical installation - Determining whether a wiring system, wiring enclosure, electrical equipment and accessories for an electrical installation in dwellings are suitable and fit for purpose - Determining the suitability of fixing methods to building fabric in the environment of the installation <ul style="list-style-type: none"> - The principles of electrical theory and installation which allow for the safe positioning, fixing and fitting of electrical wiring systems and equipment <p>With regard to Health and Safety know and understand</p> <ul style="list-style-type: none"> - The advantages and limitations of tools and equipment used for the positioning and fixing of wiring systems, wiring enclosures, electrical equipment and accessories - The effects of installing into unknown building fabric - The legal responsibilities for health and safety as required by the Health and Safety at Work Act and the Electricity At Work Regulations appropriate to working in dwellings <ul style="list-style-type: none"> - The importance of handling wiring systems, wiring enclosures, electrical equipment and accessories in the correct manner <p>With regard to Principles and theory you should know and understand as relevant:</p> <ul style="list-style-type: none"> - HSE Memorandum of guidance on The Electricity at Work Regulations (HSR 25); - Building Regulations - British Standard 7671:2001; - IEE On-Site Guide to BS7671: 2001 or equivalent. - Electricity Safety, Quality and Continuity Regulations 2002

Competence 3: INSTALL- POSITIONING, FIXING AND FITTING OF ELECTRICAL WIRING SYSTEMS, WIRING ENCLOSURES, EQUIPMENT AND ACCESSORIES IN DWELLINGS IN ACCORDANCE WITH BUILDING REGULATIONS

Understanding and Experience	Knowledge
<ol style="list-style-type: none"> 1. Adhere to agreed procedures to ensure the co-ordination of site services and the activities of other trades 2. Confirm that safe isolation has been carried out in accordance with approved industry regulatory procedures and practices before the positioning, fixing and fitting of electrical wiring systems, wiring enclosures, equipment and accessories is undertaken 3. Confirm that before work on electrical wiring systems, equipment and accessories that a supply is not present using industry approved methods. 4. Check that the measurements and mark out of all locations for electrical wiring systems, wiring enclosures and equipment to meet the electrical installation work specification and are in accordance with relevant electrical regulations and Building Regulations. 5. Confirm that the positioning, fixing and fitting of the wiring systems, wiring enclosures, electrical equipment and accessories are safe and in accordance with relevant electrical regulations, Building Regulations, manufacturers' instructions and the electrical installation work specification. 6. Report to the relevant people, in keeping with agreed procedures, those variations to the planned programme of work that may: <ul style="list-style-type: none"> • Have the potential to be dangerous, • Effect the installations fit for purpose status • Have a resource implication. 7. Confirm that the work that has been carried out meets the requirements of the electrical installation work specification 8. Ensure that portable tools are used safely, in accordance with approved codes of practice and manufacturers instructions are maintained and are fit for purpose. 	<p>Know and understand the following aspects relating to positioning, fixing and fitting electrical wiring systems, wiring enclosures, equipment and accessories</p> <ul style="list-style-type: none"> - The authority and procedures for co-ordinating information on electrical and non-electrical site services. - The advantages, disadvantages and limitations of methods and equipment used for measuring, marking out and cutting wiring systems and wiring enclosures. - The advantages, disadvantages and limitations of methods of positioning and fixing electrical wiring systems, wiring enclosures and equipment - The advantages, disadvantages and limitations of methods of fabricating wiring enclosures. - Organisational procedures for reporting variations to work schedules and completed work - Methods of carrying out routine maintenance on portable tools <p>Know and understand the following aspects relating to health and safety:</p> <ul style="list-style-type: none"> - Industry approved practices for confirming a supply is not present - The importance of using safe, fit for purpose tools for specific jobs - The significance and role of the Relevant People <p>The risks associated with positioning and fixing electrical equipment including lifting, handling and fixing</p> <p>With regard to Principles and theory know and understand as relevant:</p> <ul style="list-style-type: none"> - HSE Memorandum of guidance on The Electricity at Work Regulations (HSR 25); - Building Regulations Approved Documents "P", "G" and "L" - British Standard 7671:2001; - IEE On-Site Guide to BS7671: 2001 or equivalent. - Electricity Safety, Quality and Continuity Regulations 2002 - The principles of electrical theory and installation which allow for the safe positioning, fixing and fitting of electrical wiring systems and equipment

Competence 4: CONNECT, INSPECT, TEST and CERTIFICATE IDENTIFIED "ELECTRICAL SYSTEMS AND EQUIPMENT" IN DWELLINGS IN ACCORDANCE WITH BUILDING REGULATIONS

Understanding and Experience	Knowledge
<ol style="list-style-type: none"> 1. Confirm that the electrical wiring system, equipment and accessories to be inspected and tested are in accordance with the electrical installation work specification 2. Apply safe working practices including the identification of health and safety risks relating to the inspection and testing of electrical wiring systems and equipment and accessories 3. Confirm that safe isolation in accordance with industry approved methods as appropriate, has taken place before inspection and/or testing activities are undertaken 4. Check that connections are fit for purpose, mechanically and electrically sound and comply with the IEE Wiring Regulations (BS7671) 5. Check that the connections are in accordance with the specification, correct and clearly identified 6. Undertake, in accordance with the specification, inspection and testing of the connected electrical wiring system and equipment 7. Complete any necessary documentation related to the work legibly, accurately and timely in accordance with organisational and regulatory requirements 8. Confirm that the work meets the requirements of the specification and as appropriate the building regulations 	<ol style="list-style-type: none"> 1. Know and understand the following aspects relating to inspection and testing: 2. - The main types, their advantages and limitations of different electrical connections 3. - The procedures for the connection of circuits 4. - How to interpret diagrams and drawings to facilitate the connection, inspection and testing of electrical wiring systems and equipment in dwellings 5. - The procedures for proving a connection is mechanically and electrically sound 6. - Methods of establishing that connections in circuits and protective conductors, including connections to terminals, are fit for the purpose for which they are being used 7. - The requirements of joints and connections to be of a capacity and conductance to allow for the passage of fault currents and to prevent corrosion 8. - The application, advantages and limitations of different electrical wiring systems, equipment and accessories in dwellings 9. - The advantages and limitations of different methods for the inspection and testing of electrical wiring systems, equipment and accessories in dwellings 10. - The advantages, disadvantages and limitations of instruments used to confirm that electrical connections are fit for purpose and mechanically sound 11. - The importance of calibrating instruments at regular intervals 12. 13. Know and understand the following aspects relating to health and safety: 14. - Organisational procedures for confirming the completion of the inspection and test work and completion of necessary documentation 15. - The importance of using personal protective equipment and safe appropriate tools for inspection and testing activities 16. - Safe isolation procedures before inspection and/or test work is undertaken 17. - Industry approved practices and instruments for confirming a supply is not present 18. - The procedures for reporting any potentially dangerous situations or incidents to relevant people 19. - Your legal responsibilities for health and safety as required by the Health and Safety at Work Act and the Electricity At Work Regulations appropriate to working in dwellings

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| | <ul style="list-style-type: none">20.21. With regard to Principles and theory know and understand as relevant22. - HSE Memorandum of guidance on The Electricity at Work Regulations (HSR 25);23. - Building Regulations24. - British Standard 7671:2001;25. - IEE On-Site Guide to BS7671: 2001 or equivalent.26. - Electricity Safety, Quality and Continuity Regulations 200227. - The principles of electrical theory and installation practices which allow for the safe and efficient inspection and testing of electrical wiring systems and equipment in dwellings |
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Competence 5: MAINTAIN A HEALTHY AND SAFE WORKING ENVIRONMENT WHEN CARRYING OUT ELECTRICAL INSTALLATIONS IN DWELLINGS

Understanding and Experience	Knowledge
<ol style="list-style-type: none"> 1. Identify which workplace health and safety procedures are relevant to your working environment 2. Identify evacuation procedures and emergency exits before work commences 3. Review your working practices and your working environment for hazards which could cause serious harm 4. Control those health and safety hazards within your capability and job responsibility limits 5. Report those hazards which may present a high risk to the relevant persons responsible for health and safety in the workplace 6. Conduct yourself around the workplace in a manner that does not endanger the health and safety of yourself or other persons 7. Follow the workplace policies and suppliers' or manufacturers' instructions for the safe use of tools, plant and equipment 8. Follow agreed procedures in the event of an emergency warning 9. Follow correct procedures in the event of injuries to self and others 	<p>Know and understand the following aspects relating to Health and Safety:</p> <ul style="list-style-type: none"> - The legal duties for health and safety in the workplace as defined by the Health and Safety at Work Act 1974 - The duties for health and safety as defined by any specific legislation covering your job role - The hazards may exist in your workplace - The particular health and safety risks which may be present in your own job role - The importance of remaining alert to the presence of hazards in the whole work place - The agreed workplace health and safety procedures including site evacuation procedures and procedures for dealing with injured persons -The responsibilities for health and safety in your job description - The responsible persons to whom to report health and safety matters

Competence 6: APPROVE ELECTRICAL INSTALLATION WORK IN DWELLINGS IN ACCORDANCE WITH BUILDING REGULATIONS

Understanding and Experience	Knowledge
<ol style="list-style-type: none"> 1. Identify from the work specification what materials and plant and equipment are required in order to carry out the work efficiently, effectively and safely 2. Plan and confirm a programme of work with relevant people which includes effective co-ordination with the work of other contractors 3. Confirm that the correct amount and type of materials are available for the electrical installation work to be undertaken 4. Allocate duties and responsibilities to electrical installation operatives to make best use of their skills and job capabilities 5. Instruct the electrical installation operatives about their duties and responsibilities clearly and concisely 6. Ensure that all your communications are clear, accurate and appropriate to the situation 7. Ensure that all documentation is in accordance with relevant organisational and regulatory requirements and is legible, accurate and timely 8. Monitor that the work of electrical installation operatives is <ul style="list-style-type: none"> • Safe • Resource-effective • Within the programme of work and meets industry standards 9. Ensure that inspection, testing and commissioning activities are carried out <ul style="list-style-type: none"> • Safely • Resource-effectively • Within the programme of work • In accordance with industry recognised working practices • In accordance with relevant regulatory requirements including <ul style="list-style-type: none"> - Building Regulations - BS7671 1. Ensure that safe and appropriate action is taken promptly where a non-compliance is identified during the programme of work 2. Recognise and comply to the scope and limits of your responsibility and job role 3. Liaise with the relevant person to resolve issues which are outside the scope of your job role 4. Ensure that the work on completion is safe, complies with both the work specification, industry standards and is fit for purpose 	<p>In order to approve completed electrical installation work in dwellings in accordance with Building Regulations know and understand:</p> <ul style="list-style-type: none"> - The scope, purpose and requirements of the electrical installation work with which you are involved - How to interpret the work specification to identify the required materials, plant, equipment and accessories - How to plan a programme of work from the work specification - Safety requirements with regard to other contractors and your ability to re-schedule work to co-ordinate with their requirements - The material schedule and how to confirm you have the right type and quantity for work to start - The skills and capabilities of the electrical installation operatives for whom you are responsible - How to plan the work allocations, duties and responsibilities of electrical installation operatives for whom you are responsible - How to communicate with others including electrical installation operatives clearly and concisely - How to be effective when communicating with and responding to others - Organisational and regulatory requirements for completing the necessary documentation and how to ensure clarity, accuracy and completion within schedule - The scope for carrying out and improving the work whilst maintaining safety, resource-effectiveness and remaining within the programme of work - The relevant industry standards for work carried out in electrical installation operations - How to interpret and respond to a risk assessment and monitor changing conditions in the workplace - The advantages, disadvantages and limitations of instruments used to inspect, test and commission electrical installation work in dwellings - The importance of calibrating instruments at regular intervals - The requirements, procedures and methods of inspection, testing and commissioning as applied to the electrical installation work in dwellings - How to deal with non-compliances occurring within inspections, testing and commissioning <p>As applied to the electrical installation operations with which you are involved</p> <ul style="list-style-type: none"> - The scope of your job role and when to involve someone with higher responsibilities/accountability - How to identify that on completion the electrical installation work you are responsible for the work

	<p>being fit for purpose, safe and complies with industry standards and regulatory requirements</p> <p>Know and understand the following aspects relating to Health and safety:</p> <ul style="list-style-type: none"> - The importance of using personal protective equipment and safe appropriate tools for specific jobs - The procedures for reporting any potentially dangerous situations or incidents - Isolation procedures before connection, inspection, test and commission work is undertaken - Industry approved practices and instruments for confirming a supply is not present - Legal responsibilities for health & safety as required by the Health & Safety Act and Electricity at Work Act as appropriate to electrical installation work in dwellings <p>With regard to Principles and theory know and understand as relevant:</p> <ul style="list-style-type: none"> - 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. - Electricity Safety, Quality and Continuity Regulations 2002 - The principles of electrical theory and installation practices which allow for the safe and efficient connection, inspection and testing electrical wiring systems and equipment in dwellings
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Note: For 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.
- Manufacturers Installation and Testing Instructions where relevant
- IEE Guidance Notes 1 – 7 or equivalent.

Annex 5 Qualifications

The qualifications listed in this annex do not necessarily address all the knowledge requirements identified in annex 4, and those requirements not addressed will require assessment in accordance with clauses A5.7 or B5.7 as appropriate.

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

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

City & Guilds 2380 (16th Edition) Certificate

City and Guilds 2400

City & Guilds 2381

City & Guilds 2391

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