ETHOS

TRIED. TESTED. TRUSTED.

ELECTRICAL INSTALLATION CERTIFICATES

Conforms to the Wiring Regulations 17th Edition
BS 7671:2008 incorporating amendment 3:2015

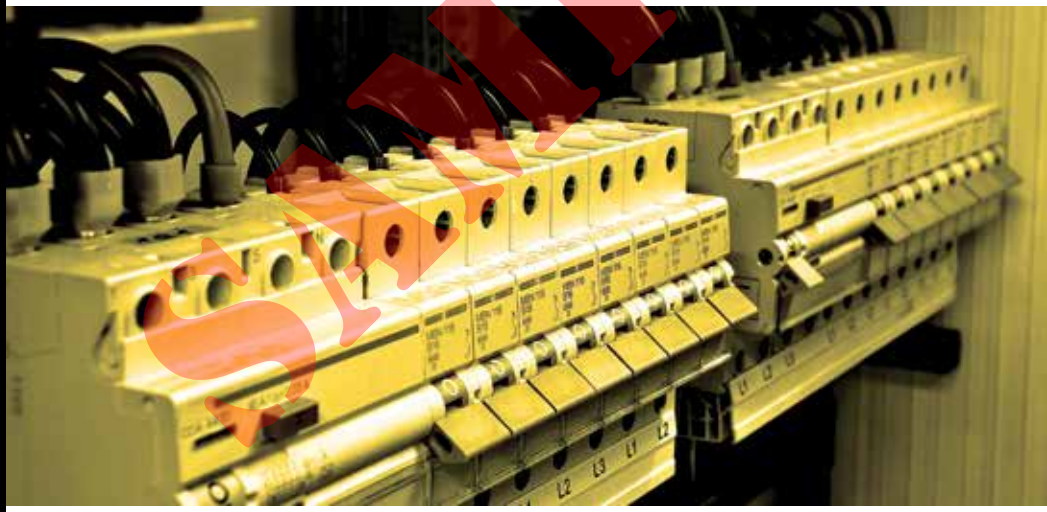
ETHOS 7971

FOR THE INITIAL CERTIFICATION OF EITHER:

- **A NEW INSTALLATION**
- **THE REPLACEMENT OF A DISTRIBUTION BOARD / CONSUMER UNIT**
- **THE INTRODUCTION OF ONE OR MORE NEW CIRCUITS TO AN EXISTING INSTALLATION**

EACH CERTIFICATE MUST BE ACCOMPANIED BY A SCHEDULE OF INSPECTIONS (INCLUDED WITHIN THIS PAD) AND ONE OR MORE SCHEDULES OF CIRCUIT DETAILS / TEST RESULTS.

ETHOS 7972 PROVIDES FOR UP TO 12 WAYS **ETHOS 7973** PROVIDES FOR UP TO 36 WAYS



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ELECTRICAL INSTALLATION CERTIFICATE

REQUIREMENTS FOR ELECTRICAL INSTALLATIONS - BS 7671 (IET Wiring Regulations)

CERT No.

CLIENT DETAILS

.....

INSTALLATION ADDRESS

.....

..... Postcode: .....

DESCRIPTION AND EXTENT OF THE INSTALLATION

✔ tick box(es) as appropriate

New installation ☐ Addition to an existing installation ☐ Alteration to an existing installation ☐

Description of installation: .....

Extent of installation work covered by this certificate: .....

.....

Use continuation sheet(s) if necessary See continuation sheet(s) No.: .....

DESIGN

I/We* being the person(s) responsible for the design of the electrical installation (as indicated by my/our* signature(s) below), particulars of which are described above, having exercised reasonable skill and care when carrying out the design hereby CERTIFY that the design work for which I/we* have been responsible is to the best of my/our* knowledge and belief in accordance with BS 7671: 2008, amended to ..... (date) except for the departure(s), if any, detailed as follows:

Details of departure(s) from BS 7671 (Regulations 120.3 & 133.5): .....

Details of permitted exceptions (Regulation 411.3.3):

..... Risk assessment appended: Yes / N/A* No. of pages [ ]

The extent of liability of the signatory or the signatories is limited to the work described above as the subject of this Certificate.
For the DESIGN of the installation:

Designer (No.1) - Signature: .....Name (CAPITALS): ..... Date: .....

Designer (No.2)* - Signature: .....Name (CAPITALS): ..... Date: .....

*(Where there is a mutual responsibility for the design)

CONSTRUCTION

I being the person responsible for the construction of the electrical installation (as indicated by my signature below), particulars of which are described above, having exercised reasonable skill and care when carrying out the construction hereby CERTIFY that the construction work for which I have been responsible is to the best of my knowledge and belief in accordance with BS 7671: 2008, amended to ..... (date) except for the departure(s), if any, detailed as follows:

Details of departure(s) from BS 7671 (Regulations 120.3 and 133.5): .....

.....

The extent of liability of the signatory is limited to the work described above as the subject of this Certificate.
For the CONSTRUCTION of the installation:

Signature: .....Name (CAPITALS): ..... Date: .....

INSPECTION & TESTING

I being the person responsible for the inspection and testing of the electrical installation (as indicated by my signature below), particulars of which are described above, having exercised reasonable skill and care when carrying out the inspection and testing hereby CERTIFY that the inspection and testing work for which I have been responsible is to the best of my knowledge and belief in accordance with BS 7671: 2008, amended to ..... (date) except for the departure(s), if any, detailed as follows:

Details of departure(s) from BS 7671 (Regulations 120.3 and 133.5): .....

.....

The extent of liability of the signatory is limited to the work described above as the subject of this Certificate.
For the INSPECTION AND TESTING of the installation:

Signature: ..... Name (CAPITALS): ..... Date: .....

NEXT INSPECTION

I/We* the designer(s), recommend that this installation is further inspected and tested after an interval of not more than YEARS ..... MONTHS .....

ELECTRICAL INSTALLATION CERTIFICATE

Guidance for Recipients

1. This safety Certificate has been issued to confirm that the electrical installation work to which it relates has been designed, constructed and inspected and tested in accordance with BS 7671: 2008 (The IET Wiring Regulations).
2. You should have received an 'original' Certificate and its duplicate should have been retained by the contractor. If you were the person ordering the work but not the owner of the installation you should pass this Certificate, or a full copy of it including the schedules, immediately to the owner.
3. The 'original' Certificate should be retained in a safe place and be shown to any person inspecting or undertaking further work on the electrical installation in the future. If you later vacate the property, this Certificate will demonstrate to the new owner that the electrical installation complied with the requirements of BS 7671 (The IET Wiring Regulations) at the time the Certificate was issued. The Construction (Design and Management) Regulations require that, for a project covered by those Regulations, a copy of this Certificate, together with the schedules, is included in the project health and safety documentation.
4. For safety reasons, the electrical installation will need to be inspected at appropriate intervals by a skilled person or persons, competent in such work. The maximum time interval recommended before the next inspection is stated on page 1 of this Certificate, located in the section entitled 'Next Inspection'. After the **initial** inspection and test, 3 years would usually apply for an industrial installation, 5 years for a commercial installation, and 10 years for a domestic installation. However, this may differ depending on how the installation will be used, and if any environmental factors may have a degrading effect on the installation.
5. This Certificate should have been issued for either the initial certification of a new installation or for where one or more new circuits have been introduced to an existing installation. It may also be issued for the replacement of a consumer unit or distribution board, or for a number of alterations or additions to an existing installation.
6. This Certificate should **not** have been issued for the periodic inspection and testing of an existing electrical installation, for which an Electrical Installation Condition Report is intended.
7. For an alteration or addition to an existing single circuit, which does not extend to the provision of a new circuit, a Minor Electrical Installation Works Certificate may be issued.
8. The signature(s) appended is/are that/those of the persons authorised by the company/ies executing the works of design, construction, and inspecting and testing, respectively. A signatory authorised to certify more than one category of work should sign in each of the appropriate places.
9. This Certificate is only valid when accompanied by a Schedule of Inspections and Schedule(s) of Circuit Details and Test Results. The page numbers for each of the Schedule(s) of Circuit Details and Test Results should be indicated, together with the total number of sheets involved.

ELECTRICAL INSTALLATION CERTIFICATE

REQUIREMENTS FOR ELECTRICAL INSTALLATIONS - BS 7671 (IET Wiring Regulations)

CERT No.

DESIGNER (No.1)

Name: .....

Company: .....

Address: .....

.....

Postcode: ..... Phone No: .....

DESIGNER (No.2) (if applicable)

Name: .....

Company: .....

Address: .....

.....

Postcode: ..... Phone No: .....

CONSTRUCTOR

Name: .....

Company: .....

Address: .....

.....

Postcode: ..... Phone No: .....

INSPECTOR

Name: .....

Company: .....

Address: .....

.....

Postcode: ..... Phone No: .....

SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS

Notes: ✔ tick box(es) where applicable
(1) by enquiry
(2) by enquiry or by measurement

Number of Live Conductors: 2/3/4*	Type of live conductors: a.c./d.c.*	
Nature of Supply: State number of sources ..... (to be detailed on attached schedules) Supply polarity confirmed ☐	Nominal voltage [1]: U .....(V) U_o ..... (V) Prospective fault current (earth fault/short-circuit)[2]:.....kA	Nominal frequency (f)[1]: ..... Hz External loop impedance (Z_e)[2]: ..... Ω
Supply Protective Device:	BS (EN): ..... Type:	Rated Current/Current Setting (I_n) ..... A
System Type(s):	TN-S ☐ TN-C-S ☐ TT ☐	TN-C ☐ IT ☐

PARTICULARS OF INSTALLATION AT THE ORIGIN

✔ tick box(es) where applicable

Means of Earthing: Distributor's Facility ☐ Installation Earth Electrode ☐

Maximum Demand (load): ..... kVA/Amps per phase

Details of Installation Earth Electrode:

Location: ..... Type (rod(s), tape etc.): .....

Electrode Resistance to Earth (R_A): ..... Ω Method of Measurement: .....

Main Protective Conductors

✔ tick box(es) where applicable

Earthing Conductor:	Material: ..... csa: ..... mm^2	Continuity and connection(s) verified ☐
Protective Bonding Conductors (to extraneous-conductive-parts):	Material: ..... csa: ..... mm^2	Continuity and connection(s) verified ☐

To: Water Installation Pipes ☐ Gas Installation Pipes ☐ Oil installation pipes ☐
Lightning protection ☐ Structural Steel ☐ Other ☐ specify: .....

Main Switch/Switch Fuse/Fuse Switch/Circuit-breaker/RCD

Location: .....

BS (EN) Type and No. of Poles: ..... Current Rating: .....A Fuse/Device rating or setting: ..... A Voltage Rating: V

Rated Residual Operating Current ($I_\Delta n$) : ..... mA Operating Time $I_\Delta n$: .....ms

Rated time delay: .....ms

NOTE: Applicable only where the RCD is suitable and is used as a main switch.

COMMENTS ON EXISTING INSTALLATION

(In case of alteration or addition, see section 633 of BS 7671)

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.....

SCHEDULE(S)

THE ATTACHED SCHEDULES ARE PART OF THIS DOCUMENT AND THIS CERTIFICATE IS VALID ONLY WHEN THEY ARE ATTACHED TO IT.

No. of Schedules of Inspections attached: ..... No. of Schedules of Test Results attached: .....

SCHEDULE OF INSPECTIONS (for NEW Work only)

Certificate No.

All boxes must be completed. A '✓' indicates that an inspection was carried out and that the result was satisfactory.
An 'N/A' indicates that an inspection was not applicable to the particular installation or an item of equipment.
For use in controlled/supervised conditions only; so not for general use.

1.0 DISTRIBUTOR'S * / SUPPLY INTAKE EQUIPMENT

- Condition of service cable
- Condition of service head
- Condition of distributor's earthing arrangement
- Condition of meter tails - distributor's and consumer's
- Condition of metering equipment
- Condition of isolator (where present)

* *The Distributor should be notified of any unsatisfactory equipment*

2.0 PARALLEL OR SWITCHED ALTERNATIVE SOURCES OF SUPPLY

- Presence of adequate arrangements where generator to operate as a switched alternative (551.6)
  - i) Dedicated earthing arrangement that is independent of the public supply
- Presence of adequate arrangements where generator to operate in parallel with the public supply system (551.7)
  - i) Correct connection of generator in parallel
  - ii) Compatibility of characteristics of means of generation
  - iii) Means to provide automatic disconnection of generator in the event of loss of public supply system or voltage or frequency deviation beyond declared values
  - iv) Means to prevent connection of generator in the event of loss of public supply system or voltage or frequency deviation beyond declared values
  - v) Means to isolate generator from the public supply system
- Presence of warning notices for alternative/additional sources of supply at:
  - i) The origin of the installation
  - ii) The meter position, where remote from the origin
  - iii) The consumer unit/distribution board to which the alternative/additional sources of supply are connected
  - iv) **All** points of isolation of **all** sources of supply

3.0 AUTOMATIC DISCONNECTION OF SUPPLY

- Presence and adequacy of protective earthing and protective bonding arrangements (411.3; Chap 54)
  - i) Distributor's earthing arrangement, or installation earth electrode arrangement
  - ii) Earthing conductor and connections
  - iii) Main protective bonding conductor(s) and connection(s)
  - iv) Earthing/bonding labels are correct and present at all appropriate locations
- Accessibility of:
  - i) Earthing conductor connections
  - ii) All protective bonding connections
- Functional extra-low voltage (FELV) – requirements satisfied (411.7)
- Reduced low voltage (RLV) – requirements satisfied(411.8)

4.0 BASIC PROTECTION

- Presence and adequacy of protective measures to provide basic protection - for prevention of contact with live parts (Sec 416 & 417)
  - i) Insulation of live parts
  - ii) Barriers or enclosures
  - iii) Obstacles#
  - iv) Placing out of reach#

5.0 ADDITIONAL PROTECTION

- The presence and effectiveness of additional protection methods (Sec 415)
  - i) Residual current device(s) not exceeding 30 mA operating current - see information in item 8 of this schedule for more detail
  - ii) Supplementary equipotential bonding

6.0 OTHER METHODS OF PROTECTION

Where used, indicate presence and effectiveness of other methods of protection against electric shock, stating location:

- Basic and fault protection
  - i) SELV .....
  - ii) PELV .....
  - iii) Double insulation/ Reinforced insulation .....
- Fault protection
  - i) Electrical separation for **one** item of equipment .....
  - ii) Non-conducting location#/Earth-free local equipotential bonding# .....
  - iii) Electrical separation for **more** than one item of equipment# .....

7.0 DISTRIBUTION EQUIPMENT

- Adequacy of working space and accessibility
- Securely fixed
- Insulation of live parts not damaged during erection
- Adequacy and security of barriers
- Suitability of enclosures for IP and fire ratings
- Enclosures not damaged during installation
- Presence and effectiveness of obstacles
- Presence of main switch(es), linked where required
- Operation of main switch(es) (functional check)
- Operation of circuit-breakers and RCDs, inc. test button (functional check)
- RCD(s) provided for fault protection, where specified
- RCD(s) provided for additional protection, where specified
- RCD(s) provided for protection against fire,where specified
- Confirmation overvoltage protection (SPDs) provided, where specified
- Confirmation of indication that SPD is functional
- Presence of legible diagrams, charts or equivalent forms of information (e.g. schedules) at or near each distribution board, where required
- Presence of RCD quarterly test notice at or near the origin
- Presence of non-standard (mixed) cable colour warning notice at or near the appropriate distribution board, where required
- Presence of periodic/next inspection and test recommendation label
- Presence of other required labelling (e.g. purpose of switchgear)
- Selection of protective device(s) and base(s); correct type and rating
- Single-pole control and protective device(s) in line conductor only
- Protection against mechanical damage where cables enter equipment
- Protection against electromagnetic (heating) effects where cables enter ferromagnetic enclosure(s)
- Confirmation that **all** conductor connections, including connections to busbars, are correctly located in terminals and are tight and secure

8.0 CIRCUITS

- Conductors correctly identified by colour, lettering or numbering
- Cable(s) correctly erected and supported throughout their length, including escape routes - with protection against abrasion
- Examination of cables for signs of mechanical damage during installation
- Examination of insulation of live parts, not damaged during erection

SCHEDULE OF INSPECTIONS (for NEW Work only)

Certificate No.

All boxes must be completed. A '✓' indicates that an inspection was carried out and that the result was satisfactory.
An 'N/A' indicates that an inspection was not applicable to the particular installation or an item of equipment.

8.0 CIRCUITS (Cont'd)

- Non-sheathed cable(s) protected by enclosure in conduit, ducting or trunking
- Suitability of containment system(s) (including flexible conduit)
- Correct temperature rating of cable insulation
- Adequacy of cable(s) for current-carrying capacity with regard to the type and nature of the installation
- Adequacy of protective device(s): type and rated current for fault protection
- Presence and adequacy of circuit protective conductor(s)
- Coordination between conductors and overload protective device(s)
- Wiring system(s) and cable installation method(s) / practices appropriate to the type and nature of installation and external influences
- Cable(s) installed under floors, above ceilings, in walls / partitions, adequately protected against damage by being:
  - i) installed in prescribed zones, or
  - ii) incorporate an earthed armour or sheath, or
  - iii) installed within an earthed wiring system (e.g. metallic conduit), or
  - iv) otherwise protected against mechanical damage sufficient to prevent penetration by nails, screws and the like
- Provision of additional protection by RCD having rated residual operating current ($I_{\Delta n}$) not exceeding 30 mA
  - i) for mobile equipment with a current rating not exceeding 32 A for use outdoors
  - ii) For **all** socket-outlets rated at 20 A or less, unless exempt (411.3.3)
  - iii) For cables installed in walls/partitions at a depth of less than 50 mm
  - iv) For cables installed in walls/partitions containing metal parts regardless of depth
- Provision of fire barriers, sealing arrangements so as to minimize the spread of fire
- Band II cables segregated and/or separated from Band I cables
- Cables segregated and/or separated from non-electrical services
- Termination of cables at enclosures
  - i) Connections under no undue strain
  - ii) No basic insulation of a conductor visible outside enclosure
  - iii) Connections of live conductors adequately enclosed
  - iv) Adequately connected at point of entry to enclosure (glands, bushes etc.)
- Accessories securely fixed, not damaged, and correctly connected
- Accessories suitable for external influences likely to be present
- Single-pole devices for switching in line conductor only
- Presence, adequacy and correct termination of connections, including cpcs, within accessories and at fixed and stationary equipment

9.0 ISOLATION AND SWITCHING

- Isolators
  - i) Presence and location of appropriate devices
  - ii) Capable of being secured in the OFF position
  - iii) Correct operation verified (functional check)
  - iv) The installation, circuit or part thereof that will be isolated is clearly identified by location and/or durable marking
  - v) Warning notice posted in situations where live parts cannot be isolated by the operation of a single device
- Switching off for mechanical maintenance
  - i) Presence of appropriate devices
  - ii) Acceptable location (state if local or remote) .....
  - iii) Capable of being secured in the OFF position
  - iv) Correct operation verified (functional check)
  - v) The circuit or part thereof to be disconnected clearly identified by location and/or durable marking
- Emergency switching/stopping
  - i) Presence of appropriate devices
  - ii) Readily accessible for operation where danger might occur
  - iii) Correct operation verified (functional check)
  - iv) The installation, circuit or part thereof to be disconnected, clearly identified by location and/or durable marking
- Functional switching
  - i) Presence of appropriate devices
  - ii) Correct operation verified (functional check)

10.0 CURRENT-USING EQUIPMENT (PERMANENTLY CONNECTED)

- Suitability of equipment in terms of IP and fire ratings
- Enclosure not damaged/deteriorated during installation so as to impair safety
- Suitability for the environment and external influences
- Equipment is securely fixed
- Cable entry holes in ceilings above luminaires, sized or sealed so as to restrict the spread of fire
- Recessed luminaires (downlighters)
  - i) Correct type of lamps fitted
  - ii) Installed to minimise build-up of heat
- Provision of undervoltage protection, where specified
- Provision of overload protection, where specified
- Adequacy of working space and accessibility to equipment

11.0 SPECIAL INSTALLATION(S) OR LOCATION(S)

List each 'Special Installation' or 'Location' that is part of the installation to be verified, and confirm that the additional requirements given in the respective section of Part 7 of BS 7671 are fulfilled.

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12.0 OTHER DETAIL / INFORMATION

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Inspected by:

Name: ..... Signature: ..... Date: .....