(2)

NAPIT

Electrical Certificate
Installation/Modification

Requirements for Electrical Installations - BS 7671: 2008 incorporating Amendment No.3, 2015 [IETWiring Regulations]

1 This safety Certificate has been issued to confirm that the electrical installation work to which it relates has been designed, constructed, inspected and tested in accordance with British Standard 7671 (the IET Wiring Regulations).

2 You should have received an •original" Certificate and the contractor should have retained a duplicate. 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.

4 If you later vacate the property, this Certificate will demonstrate to the new owner that the electrical installation complied with the requirements of British Standard 7671 at the time the Certificate was issued.

5 The Construction (Design and Management) Regulations require that, for a project covered by those Regulations, a copy of this Certificate, together with schedules, is included in the project health and safety documentation.

6 For safety reasons, the electrical installation will need to be inspected at appropriate intervals by a skilled person competent in such work. The maximum time interval recommended before the next inspection is stated on Page 1 under •NEXT INSPECTION".

7 This Certificate is intended to be issued only for a new electrical installation or for new work associated with an addition or alteration to an existing installation. It should not have been issued for the inspection of an existing electrical installation. An "Electrical Installation Condition Report" should be issued for such an inspection.

8 This Certificate is only valid if accompanied by the schedule of inspections and the schedule(s) of test results

Electrical Certificate *Installation/Modification*

Requirements for Electrical Installations – BS 7671: 2008
Incorporating Amendment No 3,2015 [IET Wiring Regulations 17th Edition]
All items inspected to confirm as appropriate, compliance with the relevant clauses in BS7671

NA/ 1 8 3 6 0 0 0 0 0 1 1 4 5

1 Details of the Installation

Client	Joseph Moore
Address	Moore Building Enterprise, Unit12, clifton moor business village James nickolson link York, North Yorkshire
Postcode	YO30 4XG

Installation *(If different from client)*	Joseph Moore
Address	61 Lawrence Street York, North Yorkshire
Postcode	YO10 3BU

2 Description, extent and limitations of the Installation (note 5)

Installation is: New ☐ Addition ✔ Alteration ✔ Records available: Yes ☐ No ✔ Date of original installation: Not Known

Description of installation	Extent of installation covered by this Certificate
Domestic - full rewire of 1st and 2nd floor accommodation areas	Full installation of accommodation areas - all sub circuits from DB1

Details of departure from BS7671 (Regulations 120.3 and 133.5): None

Details of permitted exceptions. [Regulation 411.3.3] Where applicable a suitable risk assessment[s] must be attached to this certificate: None

Risk assessment attached: ☐

3 For design, construction, inspection and testing [for sole person responsibility.]

I being the person responsible for design, construction, inspection and test of the electrical installation (as indicated by my signature below), particulars of which are described in Section 2, having exercised reasonable skill and care when carrying out the design, construction, inspection and test hereby CERTIFY that the design,construction, inspection and test for which I have been responsible is to the best of my knowledge and belief in accordance with BS 7671:2008, amended to: 2015 (date). The extent of liability of the signatory or the signatories is limited to the work described in Section 2 as subject of this certificate.

For the DESIGN / CONSTRUCTION / INSPECTION AND TEST of the installation

Company name	TG Electrical Services
Installer	Tony Gill
Company address	Hoxne Farm, Sheriff Hutton Road Strensall YORK, North Yorkshire
Postcode	YO32 5TL

Next inspection: I/We the designer[s] recommend that this installation is further inspected after an interval of not more than: 5 years

Signature	
Position	Approved Electrician
Date	22/10/2018
NAPIT membership No.	18360

4 Supply characteristics and earthing arrangements

Earthing Arrangements: TN-S ✔ TN-C-S ☐ TT ☐ Other ☐ Please specify:

Number & type of live conductors: ac ✔ d.c. ☐ No. of phases: 1 No. of wires: 2

Nature of Supply Parameters *(Note: (*) by enquiry, (*) by enquiry or by measurement)* Nominal voltage, U/U_0 (*): 230 V Nominal frequency, f (*): 50 Hz Confirmation of supply polarity ✔ Prospective fault current, I_{pf} (*): 1.0 kA External loop impedance, Z_e (*): 0.24 Ω

Supply Protective Device: BS: LIM Type: LIM Nominal Current Rating: LIM A

Other Sources of Supply:

5 Particulars of installation referred to in this certificate

Means of Earthing: Distributor's facility ✔ Installation earth electrode ☐

Details of installation Earth Electrode (where applicable): Type (e.g. rod(s), tape etc): N/A

Location: N/A Electrode resistance to earth: N/A Ω

Maximum demand: Maximum Demand (load): 79 Amps

Main Protective Conductors	Material	Csa (mm²)	Verified	(connection / continuity)			
Earthing Conductor	Copper	16	✔	Water installation	✔	Structural steel	
Protective Bonding Conductor	Copper	10	✔	Gas installation pipes	✔	Lightning protection	
Main Supply Conductor	Copper	10	✔	Oil installation pipes		Other	

Main Switch: Location: Basement BS(EN): 60947-3 No. of Poles: 2 Current Rating: 100 A

Fuse/device rating or setting: 100 A Voltage rating: 230 V

If RCD main switch: Rated residual operating current I Δn = N/A mA Rated time delay: N/A ms (at I Δn)

Measured operating trip time: N/A ms

Comments on existing installation (In the case of addition or alteration see Section 633):

None

(For additions or alterations) cables concealed within trunking and conduits or cables or conduits concealed under floors, in roof spaces and generally within the fabric of the building or underground may not have been inspected.

Schedule of Inspections attached ✔

Electrical Certificate Installation/Modification *Inspection Schedule*

for Domestic and Similar Premises with up to 100A Supply

Requirements for Electrical Installations – BS 7671: 2008 incorporating Amendment No.3,2015 [IET Wiring Regulations 17th Edition]

NA/ 1 8 3 6 0 0 0 0 0 1 1 4 5

A Schedule of Inspections

Outcomes

Acceptable condition: *Pass*	Not applicable: *N/A*

(In the Outcome column use the codes above)

Item No	Description	Outcome
1.0	**DISTRIBUTOR'S / SUPPLY INTAKE EQUIPMENT**	
1.1	Condition of service cable	Pass
1.2	Condition of service head	Pass
1.3	Condition of distributor's earthing arrangement	Pass
1.4	Condition of meter tails - Distributor / Consumer	Pass
1.5	Condition of metering equipment	Pass
1.6	Condition of isolator (where present)	Pass
2.0	**PARALLEL OR SWITCHED ALTERNATIVE SOURCES OF SUPPLY**	
2.1	Adequate arrangements where a generator set operates as a switched alternative to the public supply [551.6]	N/A
2.2	Adequate arrangements where a generator set operates in parallel with the public supply [551.7]	N/A
3.0	**AUTOMATIC DISCONNECTION OF SUPPLY**	
3.1	**Presence and adequacy of earthing and protective bonding arrangements:**	
3.1.1	Installation earth e ectrode [where applicable] [542.1.2.3]	N/A
3.1.2	Earthing conductor and connections, including accessibility [542.3,543.3.2]	Pass
3.1.3	Main protective bonding conductors and connection, including accessibility [411.3.1.2; 543.3.2]	Pass
3.1.4	Provision of safety electrical earthing / bonding labels at all appropriate locations [514.13]	Pass
3.1.5	RCD(s) provided for fault protection [411.4.9; 411.5.3]	Pass
4.0	**BASIC PROTECTION**	
4.1	**Presence and adequacy of measures to provide basic protection (prevention of contact with live parts) within the installation:**	
4.1.1	Insulation of live parts e.g. conductors completely covered with durable insulating material [461.1]	Pass
4.1.2	Barriers and enclosures e.g correct IP Rating [416.2]	Pass
5.0	**ADDITIONAL PROTECTION**	
5.1	**Presence and effectiveness of methods**	
5.1.1	RCD(s) not exceeding 30mA operating current [415.1; Part 7] see item 8.14 of this schedule	Pass
5.1.2	Supplementary bonding [415.2; Part 7]	N/A
6.0	**OTHER METHODS OF PROTECTION**	
6.1	**Presence and effectiveness of methods which give both basic and fault protection:**	
6.1.1	SELV system, including the source and associated circuits [Section 414]	N/A
6.1.2	PELV system, including the source and associated circuits [Section 414]	N/A
6.1.3	Double or reinforced insulation i.e Class II or equivalent equipment and associated circuits [Section 412]	Pass
6.1.4	Electrical separation for one item of equipment e.g. shaver supply unit [Section 413]	N/A
7.0	**CONSUMER UNIT(S) / DISTRIBUTION BOARD(S)**	
7.1	Adequacy of access and working space for items of electrical equipment including switchgear [132.12]	Pass
7.2	Presence of linked main switch(s) [537.1.4, 537 * 5, 537.1.6]	Pass
7.3	Isolators, for every circuit or group of circuits and all items of equipment [537.2]	Pass

Inspector's Name	Tony Gill	Signature
Date	Not Specified	

Electrical Certificate Installation/Modification *Inspection Schedule*

for Domestic and Similar Premises with up to 100A Supply

Requirements for Electrical Installations – BS 7671: 2008 incorporating Amendment No.3,2015 [IET Wiring Regulations 17th Edition]

NA/ 1 8 3 6 0 0 0 0 0 1 1 4 5

A Schedule of Inspections

Outcomes

Acceptable condition: *Pass*	Not applicable: *N/A*

(In the Outcome column use the codes above)

Item No.	Description	Outcome
7.4	Suitability of enclosure[s] in terms of IP and fire rating [416.2, 421.1.6, 421.1.201]	Pass
7.5	Protection against mechanical damage where cables enter equipment [522.8.1, 522.8.11]	Pass
7.6	Confirmation that A_L conductor connections are correctly located in terminals and are tight and secure [526.1]	Pass
7.7	Avoidance of heating effects where cables enter ferromagnetic enclosures e.g. steel [521.5]	Pass
7.8	Selection of correct type and ratings of circuit protective devices for overcurrent and fault protection [411.3.2, 411.4, 5, 6; Sections 432,433]	Pass
7.9	**Presence of appropriate circuit charts, warning and other notices:**	
7.9.1	Provision of circuit charts / schedules or equivalen: forms of information [514.9]	Pass
7.9.2	Warning notice of method of isolation where live parts not capable of being isolated by a single device [514.11]	Pass
7.9.3	Presence of inspection and testing notice [514.12.1]	Pass
7.9.4	RCD quarterly test notice, where required [514.12.2]	Pass
7.9.5	Warning notice of non-standard (mixed) cable colour of conductors present [514.14]	N/A
7.10	Presence of labels indicate the purpose of switchgear and protective devices [514.1.1; 514.8]	Pass
8.0	**FINAL CIRCUITS**	
8.1	Adequacy of cables for current-carrying capacity with regard for the type and nature of the installation [Section 523]	Pass
8.2	Cable installation methods suitable for the location(s) and external influences [Section 522]	Pass
8.3	Segregation / separation of Band I (ELV) from Band I (LV) circuits, and electrical and non-electrical services[528]	Pass
8.4	Cables correctly erected and supported throughout including escape routes, with protection against abrasion [Sections 521, 522]	Pass
8.5	Provision of fire barriers, sealing arrangements where necessary [527.2]	Pass
8.6	Non-sheathed cables enclosed throughout in conduit, ducting or trunking [521.10.1; 526.8]	N/A
8.7	Cables concealed under floors, above ceilings or in walls / partitions, adequately protected against damage [522.6.201; 202; 204]	Pass
8.8	Conductors correctly identified by colour , lettering or numbering [Section 514]	Pass
8.9	Presence, adequacy and correct termination of circuit protective conductors [411.3.1.1; 543.1]	Pass
8.10	Cables and conductors correctly connected, enclosed and with no undue mechanical strain [Section 526]	Pass
8.11	No basic insulation of a conductor visible outside enclosure [526.8]	Pass
8.12	Single-pole devices for switching or protection in line conductors only [132.14.1; 530.3.2]	Pass
8.13	Accessories not damaged, securely fixed, correctly connected, suitable for external influences [134.1.1; 512.2; Section 526]	Pass
8.14	**Provision of additional protection by RCD not exceeding 30mA:**	
8.14.1	Socket-outlets rated at 20 A or less unless exempt [Regulation 411.3.3]	Pass
8.14.2	Mobile equipment with a current rating not exceeding 32 A for use outdoors [411.3.3]	Pass
8.14.3	Cables concealed in walls at a depth of less than 50mm [522.6.202, 522.6.203]	Pass
8.14.4	Cables concealed in walls / partitions containing metal parts regardless of depth [522.6.203]	Pass
8.15	**Presence of appropriate devices for isolation and switching correctly located including:**	
8.15.1	Means of switching off for mechanical maintenance [537.3]	Pass

Inspector's Name	Tony Gill	Signature
Date	Not Specified	

Electrical Certificate Installation/Modification Test Schedule

for Domestic and Similar Premises with up to 100A Supply

Requirements for Electrical Installations – BS 7671:2008 incorporating Amendment No.3 2015 [IET Wiring Regulations 17th Edition]

NAPIT

NA/ 1 8 3 6 0 0 0 0 0 1 1 4 5

Client Joseph Moore

Installation address 61 Lawrence Street, York, North Yorkshire

Postcode YO10 3BU

Complete in every case

Location of distribution board: 1st floor landing

Distribution board designation: DB1

Number of ways: 12

Complete only if the distribution board is not connected directly to the origin of the installation

Supply to distribution board is from: Isolator 1

Overcurrent protective device for the distribution circuit: No. of phases 1; Nominal Voltage 230 V

Type BS(EN): 88-2-2; Rating 63 A

Supply polarity confirmed ✔; Phase sequence confirmed

Characteristics at this distribution board

Z_{db} Ω; I_{pf} kA

Operating times of associated RCD(if any): At $I_{\Delta n}$ N/A ms; at 5 $I_{\Delta n}$ N/A ms

Associated RCD (if any) BS (EN): N/A

RCD No of Poles: N/A; $I_{\Delta n}$ N/A mA

Test instrument serial number(s)

Earth fault loop imped.: 1677024

Insulation resistance: 1677024

Continuity: 1677024

RCD: 1677024

CIRCUIT DETAILS

TEST RESULTS

Circuit No. and fire No.	Circuit designation	Type of wiring	Ref method	No. of points Served	Circuit conductors csa: Live (mm²)	CPC (mm²)	Maximum disconnection time (BS 7671) (S)	Overcurrent protective devices: BS EN Number	Type No.	Rating (A)	Breaking capacity (kA)	RCD operating current $I_{\Delta n}$ (mA)	BS7671 Max. permitted value Z_s Other 80% (Ω)	Circuit impedance Ω: Ring final circuits only (measured end to end) r_1	r_n	r_2	Polarity (✔)	All circuits to be completed using R1 R2, or R2, not both: R_1+R_2	R_2	Insulation resistance (Record lower reading): Live / Live (MΩ)	Live / Earth (MΩ)	Polarity (✔)	Maximum measured Z_s (Ω)	RCD testing: at $I_{\Delta n}$ ms	at 5 $I_{\Delta n}$ ms	Test Button operation (✔)
1	Kitchen sockets	1	100	7	2.5	1.5	0.4	60898	B	32	6	30	1.10	0.35	0.35	0.51	✔	0.40	NA	>500	>500	✔	0.69	38.3	17.8	✔
2	Boiler	1	100	1	2.5	1.5	0.4	60898	B	16	6	30	2.18	NA	NA	NA	NA	0.22	NA	>500	>500	✔	0.49	38.3	17.8	✔
3	2nd floor sockets	1	100	7	2.5	1.5	0.4	60898	B	32	6	30	1.10	0.42	0.43	0.72	✔	0.64	NA	>500	>500	✔	0.88	38.3	17.8	✔
4	1st floor lights	1	100	9	1.5	1.0	0.4	60898	B	6	6	30	5.82	NA	NA	NA	NA	0.75	NA	>500	>500	✔	1.06	38.3	17.8	✔
5	Stairwell lights	1	100	11	1.5	1.0	0.4	60898	B	6	6	30	5.82	NA	NA	NA	NA	1.29	NA	>500	>500	✔	1.44	38.3	17.8	✔
6	Spare													NA	NA	NA	NA									NA
7	Hob	1	100	1	6.0	2.5	0.4	60898	B	32	6	30	1.10	NA	NA	NA	NA	0.12	NA	>500	>500	✔	0.36	39.9	19.5	✔
8	2nd floor lights	1	100	7	1.5	1.0	0.4	60898	B	6	6	30	5.82	NA	NA	NA	NA	0.90	NA	>500	>500	✔	1.10	39.9	19.5	✔
9	Fire Alarm	5	100	1	1.5	1.5	0.4	60898	B	6	6	30	5.82	NA	NA	NA	NA	0.25	NA	>500	>500	✔	0.50	39.9	19.5	✔
10	1st floor sockets	1	100	7	2.5	1.5	0.4	60898	B	16	6	30	2.18	NA	NA	NA	NA	1.40	NA	>500	>500	✔	1.68	39.9	19.5	✔
11	Entrance and router socket	1	100	2	2.5	1.5	0.4	60898	B	16	6	30	2.18	NA	NA	NA	NA	0.26	NA	>500	>500	✔	0.52	39.9	19.5	✔
12	Spare													NA	NA	NA	NA									NA

Details of circuits and/or installed equipment vulnerable to damage when testing

Wiring Types: 1= PVC/PVC 2= Single Insulated in Conduit or Trunking 3= Mineral Insulated 4= SWA/XPLE 5= FP200

None

Tested by: Name (capital letters) TONY GILL

Signature

Position Approved Electrician

Date 22/10/2018