

ELECTRICAL INSTALLATION CONDITION REPORT - UP TO 100A SUPPLY

Requirements For Electrical Installations - BS 7671

Report Reference:

Barbra Brown Rosies Cottage West Achenhean Lochwinnoch
PA12 4DR

1 DETAILS OF THE PERSON ORDERING THE REPORT

Client: Barbra Brown

Address: Rosie's Cottage, West Achenhean, Lochwinnoch, PA12 4DR

2 REASON FOR PRODUCING THIS REPORT

Reason for producing this report:
Landlord safety inspection

Date(s) on which inspection and testing was carried out: 01/11/2022

3 DETAILS OF THE INSTALLATION WHICH IS THE SUBJECT OF THIS REPORT

Installation Address: As above

Estimated age of wiring system: 3 years

Evidence of additions/
alterations: No if yes, estimated age: N/A years

Installation records available? (Regulation 651.1) N/A

Date of last inspection: N/A

4 EXTENT AND LIMITATIONS OF INSPECTION AND TESTING

Extent of the electrical installation covered by this report:
100% of the installation

Agreed limitations including the reasons (see Regulation 653.2):
No Lifting of floor boards or void areas.

Agreed with: Client

Operational limitations including the reasons:
N/A

The inspection and testing detailed in this report and accompanying schedules have been carried out in accordance with BS 7671:2018 (IET Wiring Regulations) as amended to 2022.

It should be noted that cables concealed within trunking and conduits, under floors, in roof spaces, and generally within the fabric of the building or underground, have not been inspected unless specifically agreed between the client and inspector prior to the inspection. An inspection should be made within an accessible roof space housing other electrical equipment.

5 SUMMARY OF THE CONDITION OF THE INSTALLATION

See page 3 for a summary of the general condition of the installation in terms of electrical safety.

Overall assessment of the installation in terms of it's suitability for continued use*:

SATISFACTORY

* An unsatisfactory assessment indicates that dangerous (Code C1) and/or potentially dangerous (Code C2) conditions have been identified.

6 RECOMMENDATIONS

Where the overall assessment of the suitability of the installation for continued use on page 1 is stated as 'UNSATISFACTORY', I/We recommend that any observations classified as 'Code 1 - Danger Present' or 'Code 2 - Potentially dangerous' are acted upon as a matter of urgency.

Investigation without delay is recommended for observations identified as 'FI - Further Investigation Required'.

Observations classified as 'Code 3 - Improvement recommended' should be given due consideration.

Subject to the necessary remedial action being taken, I/we recommend that the installation is further inspected and tested by:

5 Years or change of owner

Note: The proposed date for the next inspection should take into consideration the frequency and quality of maintenance that the installation can reasonably be expected to receive during its intended life. The period should be agreed between relevant parties.

8 GENERAL CONDITION OF THE INSTALLATION

General condition of the installation (in terms of electrical safety):

Reasonably for the age of the property

9 DECLARATION

I/We, being the person(s) responsible for the inspection and testing of the electrical installation (as indicated by my/our signatures below), particulars of which are described above, having exercised reasonable skill and care when carrying out the inspection and testing, hereby declare that the information in this report, including the observations and the attached schedules, provides an accurate assessment of the condition of the electrical installation taking into account the stated extent and limitations in section 4 of this report.

Trading Title: Electrical Testing Contractors

Address: 3 Ailsa View
West Kilbride
North Ayrshire

Registration Number (if applicable): Select membership no 42634

Telephone Number: 07421234307

Postcode: KA23 9GA

For the **INSPECTION, TESTING AND ASSESSMENT** of the report:

Name: Donald Connell Position: Qualified Supervisor Signature:  Date: 01/11/2022

10 SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS

Earthing Arrangements	Number and Type of Live Conductors		Nature of Supply Parameters		Supply Protective Device	
TN-S: <input checked="" type="checkbox"/>	1-phase (2-wire): N/A	2-phase (3-wire): <input checked="" type="checkbox"/>	Nominal voltage, U/Uo: 240 V	BS(EN): 1361 Fuse HBC		
TN-C-S: N/A	3-phase (3-wire): N/A	3-phase (4-wire): N/A	Nominal frequency, f: 50 Hz	Type: 2		
TT: N/A	Other: N/A		Prospective fault current, Ipf: 0.58 kA	Rated current: 100 A		
	Confirmation of supply polarity: <input checked="" type="checkbox"/>		External earth fault loop impedance, Ze: 0.40 Ω			

11 PARTICULARS OF INSTALLATION REFERRED TO IN THE REPORT

Means of Earthing	Details of Installation Earth Electrode (where applicable)			
Distributor's facility: <input checked="" type="checkbox"/>	Type: N/A	Location: N/A		
Installation earth electrode: N/A	Resistance to Earth: N/A Ω	Method of measurement: N/A		
Main Switch / Switch-Fuse / Circuit-Breaker / RCD		If RCD main switch:		
Location: Hall cupboard	RCD Type: N/A			
BS(EN): 60947-3 Isolator	Current rating: 100 A	Rated residual operating current ($I_{\Delta n}$): N/A mA		
Number of poles: 2	Fuse/device rating or setting: 100 A	Rated time delay: N/A ms		
	Voltage rating: 240 V	Measured operating time: N/A ms		
Earthing and Protective Bonding Conductors		Bonding of extraneous-conductive parts		
Earthing conductor	Connection/continuity verified: <input checked="" type="checkbox"/>	To water installation pipes: <input checked="" type="checkbox"/>	To gas installation pipes: N/A	
Conductor material: Copper	csa: 16 mm ²	To oil installation pipes: <input checked="" type="checkbox"/>	To lightning protection: N/A	
Main protective bonding conductors	Connection/continuity verified: <input checked="" type="checkbox"/>	To structural steel: N/A	To other service(s): 2	
Conductor material: Copper	csa: 610 mm ²			

12 INSPECTION SCHEDULE FOR DOMESTIC & SIMILAR PREMISES WITH UP TO 100A SUPPLY

Item	Description	Outcome
1.0	INTAKE EQUIPMENT (VISUAL INSPECTION ONLY) An outcome against an item in this section, other than access to live parts, should not be used to determine the overall outcome.	
1.1	Distributor/supplier intake equipment	
1.1.1	Service cable	Pass
1.1.2	Service head	Pass
1.1.3	Earthing arrangement	Pass
1.1.4	Meter tails	Pass
1.1.5	Metering equipment	Pass
1.1.6	Isolator (where present)	Pass
	Where inadequacies in the intake equipment are encountered, which may result in a dangerous or potentially dangerous situation, the person ordering the work and/or the dutyholder must be informed. It is strongly recommended that the person ordering the work informs the appropriate authority. For this section only, where inadequacies are found, an 'X' should be put against the appropriate item and a comment made in Section 7.	
	Has the person ordering the work / dutyholder been notified?	N/A
1.2	Consumer's isolator (where present)	Pass
1.3	Consumer's meter tails	Pass
2.0	PRESENCE OF ADEQUATE ARRANGEMENTS FOR OTHER SOURCES SUCH AS MICROGENERATORS (551.6; 551.7)	N/A
3.0	EARTHING / BONDING ARRANGEMENTS (411.3; Chap 54)	
3.1	Presence and condition of distributor's earthing arrangement (542.1.2.1; 542.1.2.2)	Pass
3.2	Presence and condition of earth electrode connection where applicable (542.1.2.3)	N/A
3.3	Provision of earthing/bonding labels at all appropriate locations (514.13.1)	Pass
3.4	Confirmation of earthing conductor size (542.3; 543.1.1)	Pass
3.5	Accessibility and condition of earthing conductor at MET (543.3.2)	Pass
3.6	Confirmation of main protective bonding conductor sizes (544.1)	Pass
3.7	Condition and accessibility of main protective bonding conductor connections (543.3.2; 544.1.2)	Pass
3.8	Accessibility and condition of other protective bonding connections (543.3.1; 543.3.2)	Pass
4.0	CONSUMER UNIT(S) / DISTRIBUTION BOARD(S)	
4.1	Adequacy of working space/accessibility to consumer unit/distribution board (132.12; 513.1)	Pass
4.2	Security of fixing (134.1.1)	Pass
4.3	Condition of enclosure(s) in terms of IP rating etc (416.2)	Pass
4.4	Condition of enclosure(s) in terms of fire rating etc (421.1.201; 526.5)	Pass
4.5	Enclosure not damaged/deteriorated so as to impair safety (651.2)	Pass
4.6	Presence of main linked switch (as required by 462.1.201)	Pass
4.7	Operation of main switch (functional check) (643.10)	Pass
4.8	Manual operation of circuit-breakers and RCDs to prove disconnection (643.10)	Pass
4.9	Correct identification of circuit details and protective devices (514.8.1; 514.9.1)	Pass
4.10	Presence of RCD six-monthly test notice, where required (514.12.2)	Pass
4.11	Presence of alternative supply warning notice at or near consumer unit/distribution board (514.15)	N/A
4.12	Presence of other required labelling (please specify) (Section 514)	N/A
4.13	Compatibility of protective devices, bases and other components; correct type and rating (No signs of unacceptable thermal damage, arcing or overheating) (411.3.2; 411.4; 411.5; 411.6; Sections 432, 433)	Pass
4.14	Single-pole switching or protective devices in line conductor only (132.14.1; 530.3.3)	Pass
4.15	Protection against mechanical damage where cables enter consumer unit/distribution board (132.14.1; 522.8.1; 522.8.5; 522.8.11)	Pass
4.16	Protection against electromagnetic effects where cables enter consumer unit/distribution board/enclosures (521.5.1)	Pass
4.17	RCD(s) provided for fault protection - includes RCBOs (411.4.204; 411.5.2; 531.2)	Pass
4.18	RCD(s) provided for additional protection/requirements - includes RCBOs (411.3.3; 415.1)	Pass
4.19	Confirmation of indication that SPD is functional (651.4)	N/A
4.20	Confirmation that ALL conductor connections, including connections to busbars, are correctly located in terminals and are tight and secure (526.1)	Pass
4.21	Adequate arrangements where a generating set operates as a switched alternative to the public supply (551.6)	N/A
4.22	Adequate arrangements where a generating set operates in parallel with the public supply (551.7)	N/A

OUTCOMES													
Acceptable condition	PASS	Unacceptable condition	C1 or C2	Improvement recommended	C3	Further investigation	FI	Not verified	N/V	Limitation	LIM	Not applicable	N/A

12 INSPECTION SCHEDULE FOR DOMESTIC & SIMILAR PREMISES WITH UP TO 100A SUPPLY

Item	Description	Outcome
5.0	FINAL CIRCUITS	
5.1	Identification of conductors (514.3.1)	Pass
5.2	Cables correctly supported throughout their run (521.10.202; 522.8.5)	LIM
5.3	Condition of insulation of live parts (416.1)	Pass
5.4	Non-sheathed cables protected by enclosure in conduit, ducting or trunking (521.10.1)	N/A
5.4.1	To include the integrity of conduit and trunking systems (metallic and plastic)	N/A
5.5	Adequacy of cables for current-carrying capacity with regard for the type and nature of installation (Section 523)	Pass
5.6	Coordination between conductors and overload protective devices (433.1; 533.2.1)	Pass
5.7	Adequacy of protective devices: type and rated current for fault protection (411.3)	Pass
5.8	Presence and adequacy of circuit protective conductors (411.3.1; Section 543)	Pass
5.9	Wiring system(s) appropriate for the type and nature of the installation and external influences (Section 522)	Pass
5.10	Concealed cables installed in prescribed zones (see Section 4. Extent and Limitations) (522.6.202)	LIM
5.11	Cables concealed under floors, above ceilings or in walls/partitions, adequately protected against damage (see Section 4. Extent and Limitations) (522.6.204)	LIM
5.12	Provision of additional requirements for protection by RCD not exceeding 30mA:	
5.12.1	For all socket-outlets of rating 32A or less, unless an exception is permitted (411.3.3)	Pass
5.12.2	For the supply of mobile equipment not exceeding 32A rating for use outdoors (411.3.3)	Pass
5.12.3	For cables concealed in walls at a depth of less than 50mm (522.6.202; 522.6.203)	Pass
5.12.4	For cables concealed in walls/partitions containing metal parts regardless of depth (522.6.203)	Pass
5.12.5	Final circuits supplying luminaires within domestic (household) premises (411.3.4)	Pass
5.13	Provision of fire barriers, sealing arrangements and protection against thermal effects (Section 527)	LIM
5.14	Band II cables segregated/separated from Band I cables (528.1)	N/A
5.15	Cables segregated/separated from communications cabling (528.2)	N/A
5.16	Cables segregated/separated from non-electrical services (528.3)	N/A
5.17	Termination of cables at enclosures - indicate extent of sampling in Section 4 of the report (Section 526)	
5.17.1	Connections soundly made and under no undue strain (526.6)	Pass
5.17.2	No basic insulation of a conductor visible outside enclosure (526.8)	Pass
5.17.3	Connections of live conductors adequately enclosed (526.5)	Pass
5.17.4	Adequately connected at point of entry to enclosure (glands, bushes etc.) (522.8.5)	Pass
5.18	Condition of accessories including socket-outlets, switches and joint boxes (651.2(v))	Pass
5.19	Suitability of accessories for external influences (512.2)	Pass
5.20	Adequacy of working space/accessibility to equipment (132.12; 513.1)	Pass
5.21	Single-pole switching or protective devices in line conductors only (132.14.1, 530.3.3)	Pass
6.0	LOCATION(S) CONTAINING A BATH OR SHOWER	
6.1	Additional protection for all low voltage (LV) circuits by RCD not exceeding 30mA (701.411.3.3)	Pass
6.2	Where used as a protective measure, requirements for SELV or PELV met (701.414.4.5)	N/A
6.3	Shaver supply units comply with BS EN 61558-2-5 formerly BS 3535 (701.512.3)	Pass
6.4	Presence of supplementary bonding conductors, unless not required by BS 7671:2018 (701.415.2)	N/A
6.5	Low voltage (e.g. 230 V) socket-outlets sited at least 2.5m from zone 1 (701.512.3)	Pass
6.6	Suitability of equipment for external influences for installed location in terms of IP rating (701.512.2)	Pass
6.7	Suitability of accessories and controlgear etc. for a particular zone (701.512.3)	Pass
6.8	Suitability of current-using equipment for particular position within the location (701.55)	Pass
7.0	OTHER PART 7 SPECIAL INSTALLATIONS OR LOCATIONS List all other special installation or locations present, if any. (Record separately the results of particular inspections)	
7.1	N/A	N/A
7.2	N/A	N/A
8.0	PROSUMER'S LOW VOLTAGE ELECTRICAL INSTALLATION(S) Where the installation includes additional requirements and recommendations relating to Chapter 82, additional inspection items should be added to the checklist below.	
8.1	N/A	N/A
8.2	N/A	N/A

Inspected by:

Name: Position: Signature:  Date:

OUTCOMES													
Acceptable condition	PASS	Unacceptable condition	C1 or C2	Improvement recommended	C3	Further investigation	FI	Not verified	N/V	Limitation	LIM	Not applicable	N/A

DISTRIBUTION BOARD DETAILS

DB reference: **DB 1** Location: **Dining room cupboard** Supplied from: **Main supply**

Distribution circuit OCPD: BS (EN): **1361 Fuse HBC** Type: **2** Rating/Setting: **100 A** No of phases: **1**

SPD Details: Types: T1 **N/A** T2 **N/A** T3 **N/A** **N/A** Status indicator checked (where functionality indicator present) **N/A**

Confirmation of supply polarity Confirmation of phase sequence Zs at DB: **0.40 Ω** Ipf at DB: **0.80 kA**

SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

CIRCUIT DETAILS													TEST RESULT DETAILS																		
Circuit number	Circuit description	Conductor details						Overcurrent protective device					RCD				Continuity (Ω)			Insulation resistance			Zs	RCD	AFDD						
		Type of wiring	Reference method	Number of points served	Number and size		Max disconnect time permitted by BS7671 (s)	BS (EN)	Type	Rating (A)	Breaking capacity (kA)	Maximum permitted Zs (Ω)	BS (EN)	Type	Rated operating current (mA)	Rating (A)	Ring final circuit			R1+R2 or R2	Test voltage (V)	Live - Live (MΩ)				Live - Earth (MΩ)	Polarity (tick)	Maximum measured (Ω)	Disconnection time (ms)	Test button operation (tick)	Manual test button operation (tick)
					Live (mm ²)	cpc (mm ²)											r1 (line)	r _n (neutral)	r2 (cpc)												
1 1	Shower	A	100	1	10	4	0.4	60898	B	40	6	0.87	61008	AC	30	63	---	---	---	0.41	N/A	250	>200	>200	<input checked="" type="checkbox"/>	0.81	29.1	<input checked="" type="checkbox"/>	N/A		
2 1	Downstairs Sockets	A	100	10	2.5	1.5	0.4	60898	B	32	6	1.10	61008	AC	30	63	0.65	0.65	1.10	0.23	N/A	250	>200	>200	<input checked="" type="checkbox"/>	0.63	29.1	<input checked="" type="checkbox"/>	N/A		
3 1	Upstairs lighting	A	100	27	1.5	1.0	0.4	60898	B	6	6	5.82	61008	AC	30	63	---	---	---	0.79	N/A	250	>200	>200	<input checked="" type="checkbox"/>	1.19	29.1	<input checked="" type="checkbox"/>	N/A		
4 1	Smoke detectors	A	100	4	1.5	1.0	0.4	60898	B	6	6	5.82	61008	AC	30	63	---	---	---	1.31	N/A	250	>200	>200	<input checked="" type="checkbox"/>	1.71	29.1	<input checked="" type="checkbox"/>	N/A		
5 1	Water heater heater	A	100	1	2.5	1.5	0.4	60898	B	16	6	2.18	61008	AC	30	63	---	---	---	0.58	N/A	250	>200	>200	<input checked="" type="checkbox"/>	0.98	29.1	<input checked="" type="checkbox"/>	N/A		
6 1	Hot tub	A	100	1	2.5	1.5	0.4	60898	B	16	6	2.18	61008	AC	30	63	---	---	---	0.38	N/A	250	>200	>200	<input checked="" type="checkbox"/>	0.78	29.1	<input checked="" type="checkbox"/>	N/A		
7 1	Cooker	A	100	1	6	2.5	0.4	60898	B	40	6	0.87	61008	AC	30	63	---	---	---	0.35	N/A	250	>200	>200	<input checked="" type="checkbox"/>	0.75	20.5	<input checked="" type="checkbox"/>	N/A		
8 1	Upstairs Sockets	A	100	10	2.5	1.5	0.4	60898	B	32	6	1.10	61008	AC	30	63	0.59	0.59	1.04	0.23	N/A	250	>200	>200	<input checked="" type="checkbox"/>	0.63	20.5	<input checked="" type="checkbox"/>	N/A		
9 1	Kitchen Sockets	A	100	7	2.5	1.5	0.4	60898	B	32	6	1.10	61008	AC	30	63	0.55	0.56	0.96	0.19	N/A	250	>200	>200	<input checked="" type="checkbox"/>	0.59	20.5	<input checked="" type="checkbox"/>	N/A		
10 1	Downstairs Lighting	A	100	7	1.5	1.0	0.4	60898	B	6	6	5.82	61008	AC	30	63	---	---	---	0.77	N/A	250	>200	>200	<input checked="" type="checkbox"/>	1.17	20.5	<input checked="" type="checkbox"/>	N/A		
11 1	Oil boiler	A	100	1	1.5	1.0	0.4	60898	B	6	6	5.82	61008	AC	30	63	---	---	---	0.34	N/A	250	>200	>200	<input checked="" type="checkbox"/>	0.74	20.5	<input checked="" type="checkbox"/>	N/A		

CODES FOR TYPE OF WIRING	A	B	C	D	E	F	G	H	O - Other
	Thermoplastic insulated/sheathed cables	Thermoplastic cables in metallic conduit	Thermoplastic cables in nonmetallic conduit	Thermoplastic cables in metallic trunking	Thermoplastic cables in nonmetallic trunking	Thermoplastic /SWA cables	Thermosetting /SWA cables	Mineral insulated cables	N/A


DETAILS OF TEST INSTRUMENTS

Details of test instruments used (serial and/or asset numbers):

Multi-functional: **Yes 101690766** Insulation resistance: **101690766** Continuity: **101690766**

Earth electrode resistance: **101690766** Earth fault loop impedance: **101690766** RCD: **101690766**

TESTED BY

Name: **Donald Connell** Position: **Qualified Supervisor** Signature:  Date: **01/11/2022**

ELECTRICAL INSTALLATION CONDITION REPORT GUIDANCE FOR RECIPIENTS

(to be appended to the Report)

This Report is an important and valuable document which should be retained for future reference.

1. The purpose of this Report is to confirm, so far as reasonably practicable, whether or not the electrical installation is in a satisfactory condition for continued service (see Section 5). The Report should identify any damage, deterioration, defects and/or conditions which may give rise to danger (see Section 7).
2. This Report is only valid if accompanied by the Inspection Schedule(s) and the Schedule(s) of Circuit Details and Test Results
3. The person ordering the Report should have received the 'original' Report and the inspector should have retained a duplicate.
4. The original Report should be retained in a safe place and be made available to any person inspecting or undertaking work on the electrical installation in the future. If the property is vacated, this Report will provide the new owner/occupier with details of the condition of the electrical installation at the time the Report was issued.
5. Section 4 (Extent and Limitations) should identify fully the extent of the installation covered by this Report and any limitations on the inspection and testing. The inspector should have agreed these aspects with the person ordering the Report and with other interested parties (licensing authority, insurance company, mortgage provider and the like) before the inspection was carried out.
6. Some operational limitations such as inability to gain access to parts of the installation or an item of equipment may have been encountered during the inspection. The inspector should have noted these in Section 4.
7. For items classified in Section 7 as C1 (Danger present), the safety of those using the installation is at risk, and it is recommended that a skilled person or persons competent in electrical installation work undertakes the necessary remedial work immediately.
8. For items classified in Section 7 as C2 (Potentially dangerous), the safety of those using the installation is at risk and it is recommended that a skilled person or persons competent in electrical installation work undertakes the necessary remedial work as a matter of urgency.
9. Where it has been stated in Section 7 that an observation requires further investigation (code F1) the inspection has revealed an apparent deficiency which may result in a code C1 or C2, and could not, due to the extent or limitations of the inspection, be fully identified. Such observations should be investigated without delay. A further examination of the installation will be necessary, to determine the nature and extent of the apparent deficiency (see Section 7).
10. For safety reasons, the electrical installation should be re-inspected at appropriate intervals by a skilled person or persons, competent in such work. The recommended date by which the next inspection is due is stated in Section 7 of the Report under Recommendations.
11. Where the installation includes a residual current device (RCD) it should be tested six-monthly by pressing the button marked 'T' or 'Test'. The device should switch off the supply and should then be switched on to restore the supply. If the device does not switch off the supply when the button is pressed, seek expert advice. For safety reasons it is important that this instruction is followed.
12. Where the installation includes an arc fault detection device (AFDD) having a manual test facility it should be tested six-monthly by pressing the test button. Where an AFDD has both a test button and automatic test function, manufacturer's instructions shall be followed with respect to test button operation.
13. Where the installation includes a surge protective device (SPD) the status indicator should be checked to confirm it is in operational condition in accordance with manufacturer's information. If the indication shows that the device is not operational, seek expert advice. For safety reasons it is important that this instruction is followed.
14. Where the installation includes alternative or additional sources of supply, warning notices should be found at the origin or meter position or, if remote from the origin, at the consumer unit or distribution board and at all points of isolation of all sources of supply.