ELECTRICAL INSTALLATION CONDITION REPORT

Requirements For Electrical Installations - BS 7671

Certificate Number: 2023-0651

1 DETAILS OF THE PERSON ORDERING THE REPORT

Client: WESSEX RFCA

Address: ,, ,, ,, ,

2 REASON FOR PRODUCING THIS REPORT

Reason for producing this report:

SAFETY ASSESSMENT REQUESTED BY THE CLIENT TO ASCERTAIN THE "IN SERVICE" CONDITION OF THE ELECTRICAL INSTALLATION IN LINE WITH THE ELECTRICAL SAFETY STANDARDS.

Date on which inspection and testing was carried out: 20/09/2023

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

Installation Address: CAMBORNE PLATOON, NORTH ROSKEAR ROAD,, CAMBORNE,, CORNWALL, TR14 8PU

Description of premises: Domestic N/A Commercial ✔ Industrial N/A Other: N/A

Estimated age of wiring system: 20 years Evidence of additions/ alterations: Yes if yes, estimated age: 5 years

Installation records available? (Regulation 651.1) No Date of last inspection: 20/09/2023

4 EXTENT AND LIMITATIONS OF INSPECTION AND TESTING

Extent of the electrical installation covered by this report:

FIXED INSTALLATION AT THE ABOVE ADDRESS INCLUDING 80% SAMPLES OF ACCESSORIES, 100% DISTRIBUTION BOARDS EARTHING/PROTECTIVE BONDING CONDUCTORS AND FINAL DISTRIBUTION CIRCUITS IN ACCORDANCE WITH ITEM 3.8 OF GUIDANCE NOTES 3

Agreed limitations including the reasons (see Regulation 653.2):

CHARACTERISTICS OF PRIMARY OVERCURRENT DEVICE AS UNABLE TO WITHDRAW AT TIME OF TEST.
THE INSTALLATION AND SUPPLY TO THE NEW WERNICK BUILDING IS NOT COVERED IN THIS REPORT AS IS A NEW BUILDING AND IS COVERED BY THE INSTALLATION CERTIFICATE DONE BY OTHER CONTRACTORS.

Agreed with: CLIENT

Operational limitations including the reasons:

ALL ZS READINGS WERE CALCULATED USING THE ZS AT THE D/B WITH THE R1+R2 READINGS OBTAINED TO LIMIT THE TIME OF LIVE WORKING.
THERE ARE SOME LIMITATIONS TO THE INSULATION RESISTANCE TESTING DUE TO VOLTAGE SENSITIVE EQUIPMENT ATTACHED WHICH COULD NOT BE REMOVED AT THE TIME OF THE TEST.

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*: UNSATISFACTORY

* 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 tenant/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.

7 OBSERVATIONS AND RECOMMENDATIONS FOR ACTIONS TO BE TAKEN

Referring to the attached schedules of inspection and test results, and subject to the limitations specified on page 1 of this report under 'Extent of the Installation and Limitations of Inspection and Testing':

N/A There are no items adversely affecting electrical safety

or

✔ The following observations and recommendations are made

Item No	Observations	Classification Code
1	D/B SHOOTING RANGE HAS A 100ma AC TYPE RCD AS ITS MAIN SWITCH BUT IS SUPPLIED FROM D/B1 CCT6L3 WHICH IS PROTECTED BY A 30ma RCBO, TWO DIFFERENT TYPE RCD'S CASCADING- POTENIAL SELECTIVITY ISSUES	C3
2	METAL CLAD SOCKET IN SHOOTING RANGE ONE SIDE HAS VERY HIGH LOOP READING NEEDS REPLACING	C2
3	THERE IS NO SURGE PROTECTION TO THE INSTALLATION	C3
4	D/B GARAGE CCT 6 LIGHTS HAVE BEEN DISCONNECTED DUE TO BUILDING WORKS WHERE THE OFFICE HAS BEEN REMOVED AND ALL THE CABLES WERE CUT LEAVING OPEN ENDS	NOTE
5	IN THE GARAGE AREA THERE IS A LARGE SECTION OF THE STEEL TRUNKING HANGING LOOSE WHERE PART OF THE BUILDING HAS BEEN REMOVED ALSO SOME OF THE TRUNKING LID IS MISSING	C2
6	D/B GARAGE CCT5 IS A 30ma RCBO WHICH IS CASCADING WITH THE SUBMAIN RCBO WHICH IS ALSO 30ma- POTENIAL SELECTIVITY ISSUES	C3

One of the following codes, as appropriate, has been allocated to each of the observations made above to indicate to the person(s) responsible for the installation the degree of urgency for remedial action.

C1	Danger Present Risk of injury. Immediate remedial action required	C2	Potentially dangerous Urgent remedial action required	C3	Improvement recommended	FI	Further investigation required without delay

Immediate remedial action required for items:	N/A
Urgent remedial action required for items:	2, 5
Improvement recommended for items:	1, 3, 6
Further investigation required for items:	N/A

8 GENERAL CONDITION OF THE INSTALLATION

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

THE INSTALLATION IS IN A REASONABLE CONDITION WITH A FEW MINOR CORRECTIONS NEEDED TO OBTAIN A SATISFACTORY REPORT.

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:	DAVEY AND GILBERT LTD				
Address:	UNIT 1 PENSANS ROSPEATH INDUSTRIAL ESTATE ROSPEATH LANE , CROWLAS Postcode: TR20 8DU	Registration Number (if applicable):	22449		
		Telephone Number:	01736 332749		

For the INSPECTION, TESTING AND ASSESSMENT of the report:

Name:	MR S. GILBERT	Position:	ELECTRICIAN	Signature:		Date:	20/09/2023

Report reviewed and authorised for issue by:

Name:	MR P. EDDY	Position:	QUALIFIED SUPERVISOR	Signature:		Date:	22/09/2023

10 SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS

Earthing Arrangements		Number and Type of Live Conductors						Nature of Supply Parameters		Supply Protective Device	
TN-S:	N/A	AC:	✔	1-phase (2-wire):	N/A	2-phase (3-wire):	N/A	Nominal voltage, U/Uo:	415 V	BS (EN):	LIM
TN-C-S:	N/A			3-phase (3-wire):	N/A	3-phase (4-wire):	✔	Nominal frequency, f:	50 Hz	Type:	LIM
TNC:	N/A	DC:	N/A	2-wire:	N/A	3-wire:	N/A	Prospective fault current, Ipf:	1.6 kA	Rated current:	LIM A
TT:	✔	Other:	N/A					External earth fault loop impedance, Ze:	13.74 Ω		
IT:	N/A	Confirmation of supply polarity:					✔	Number of supplies:	1		

11 PARTICULARS OF INSTALLATION REFERRED TO IN THE REPORT

Means of Earthing

Distributor's facility:	N/A	Type:	Earth Rod	Location:	NEXT TO EXTERIOR METER BOX AT THE
Installation earth electrode:	✔	Resistance to Earth:	13.7 Ω	Method of measurement:	Test Method 2 (Loop Tester)

Details of Installation Earth Electrode (where applicable)

Main Switch / Switch-Fuse / Circuit-Breaker / RCD

Location:	OUTSIDE METER BOX	BS (EN):	61008 RCD	Number of poles:	4		
Current rating:	100 A	Fuse/device rating or setting:	N/A A	Voltage rating:	415 V		
If RCD main switch:							
RCD Type:	A	Rated residual operating current ($I_{\Delta n}$):	100 mA	Rated time delay:	130-5 ms	Measured operating time:	316.7 ms

Earthing and Protective Bonding Conductors

Earthing conductor					
Conductor material:	Copper	csa:	16 mm²	Connection/ continuity verified:	✔
Main protective bonding conductors					
Conductor material:	Copper	csa:	N/A mm²	Connection/ continuity verified:	N/A

Bonding of extraneous-conductive parts

To water installation pipes:	N/A	To gas installation pipes:	N/A
To oil installation pipes:	N/A	To lightning protection:	N/A
To structural steel:	N/A	To other service(s):	N/A

12 INSPECTION SCHEDULE

Item	Description	Outcome
1.0	EXTERNAL CONDITION OF INTAKE EQUIPMENT (VISUAL INSPECTION ONLY) Where inadequacies in intake equipment are encountered, it is recommended that the person ordering the report informs the appropriate authority	
1.1	Service cable	Pass
1.2	Service head	Pass
1.3	Earthing arrangements	Pass
1.4	Meter tails	Pass
1.5	Metering equipment	Pass
1.6	Isolator (where present)	N/A
2.0	PRESENCE OF ADEQUATE ARRANGEMENTS FOR PARALLEL OR SWITCHED ALTERNATIVE SOURCES	
2.1	Adequate arrangements where a generating set operates as a switched alternative to the public supply (551.6)	N/A
2.2	Adequate arrangements where a generating set operates in parallel with the public supply (551.7)	N/A
3.0	AUTOMATIC DISCONNECTION OF SUPPLY	
3.1	Main earthing/bonding arrangements (411.3; Chap 54):	
3.1.1	Presence of distributor's earthing arrangement (542.1.2.1; 542.1.2.2), or presence of installation earth electrode arrangement (542.1.2.3)	Pass
3.1.2	Adequacy of earthing conductor size (542.3; 543.1.1)	Pass
3.1.3	Adequacy of earthing conductor connections (542.3.2)	Pass
3.1.4	Accessibility of earthing conductor connections (543.3.2)	Pass
3.1.5	Adequacy of main protective bonding conductor sizes (544.1)	N/A
3.1.6	Adequacy and location of main protective bonding conductor connections (543.3.2; 544.1.2)	N/A
3.1.7	Accessibility of all protective bonding connections (543.3.2)	N/A
3.1.8	Provision of earthing/bonding labels at all appropriate locations (514.13)	Pass
3.2	FELV - requirements satisfied (411.7; 411.7.1)	Pass
4.0	OTHER METHODS OF PROTECTION (where any of the methods listed below are employed details should be provided on separate sheets)	
4.1	Non-conducting location (418.1)	N/A
4.2	Earth-free local equipotential bonding (418.2)	Pass
4.3	Electrical separation (Section 413; 418.3)	Pass
4.4	Double insulation (Section 412)	Pass
4.5	Reinforced insulation (Section 412)	Pass
5.0	DISTRIBUTION EQUIPMENT	
5.1	Adequacy of working space/accessibility to equipment (132.12; 513.1)	Pass
5.2	Security of fixing (134.1.1)	Pass
5.3	Condition of insulation of live parts (416.1)	Pass
5.4	Adequacy/security of barriers (416.2)	Pass
5.5	Condition of enclosure(s) in terms of IP rating etc (416.2)	Pass
5.6	Condition of enclosure(s) in terms of fire rating etc (421.1.6; 421.1.201; 526.5)	Pass
5.7	Enclosure not damaged/deteriorated so as to impair safety (651.2)	Pass
5.8	Presence and effectiveness of obstacles (417.2)	Pass
5.9	Presence of main switch(es), linked where required (462.1; 462.1.201; 462.2)	Pass
5.10	Operation of main switch(es) (functional check) (643.10)	Pass
5.11	Manual operation of circuit-breakers, RCDs and AFDDs to prove functionality (643.10)	Pass
5.12	Confirmation that integral test button/switch causes RCD(s) to trip when operated (functional check) (643.10)	Pass
5.13	RCD(s) provided for fault protection – includes RCBOs (411.4.204; 411.5.2; 531.2)	Pass
5.14	RCD(s) provided for additional protection/requirements, where required – includes RCBOs (411.3.3; 415.1)	Pass

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 (CONTINUED)

Item	Description	Outcome
5.15	Presence of RCD six-monthly test notice, where required (514.12.2)	Pass
5.16	Presence of diagrams, charts or schedules at or near equipment, where required (514.9.1)	Pass
5.17	Presence of alternative supply warning notice at or near equipment, where required (514.15)	N/A
5.18	Presence of next inspection recommendation label (514.12.1)	Pass
5.19	Presence of other required labelling (please specify) (Section 514)	N/A
5.20	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
5.21	Single-pole switching or protective devices in line conductors only (132.14.1; 530.3.3)	Pass
5.22	Protection against mechanical damage where cables enter equipment (522.8.1; 522.8.5; 522.8.11)	Pass
5.23	Protection against electromagnetic effects where cables enter ferromagnetic enclosures (521.5.1)	Pass
6.0	DISTRIBUTION CIRCUITS	
6.1	Identification of conductors (514.3.1)	Pass
6.2	Cables correctly supported throughout their run (521.10.202; 522.8.5)	Pass
6.3	Condition of insulation of live parts (416.1)	Pass
6.4	Non-sheathed cables protected by enclosure in conduit, ducting or trunking (521.10.1)	Pass
6.5	Suitability of containment systems for continued use (including flexible conduit) (Section 522)	Pass
6.6	Cables correctly terminated in enclosures (Section 526)	Pass
6.7	Confirmation that ALL conductor connections, including connections to busbars, are correctly located in terminals and are tight and secure (526.1)	Pass
6.8	Examination of cables for signs of unacceptable thermal or mechanical damage/deterioration (421.1; 522.6)	Pass
6.9	Adequacy of cables for current-carrying capacity with regard for the type and nature of installation (Section 523)	Pass
6.10	Adequacy of protective devices: type and rated current for fault protection (411.3)	Pass
6.11	Presence and adequacy of circuit protective conductors (411.3.1.1; 543.1)	Pass
6.12	Coordination between conductors and overload protective devices (433.1; 533.2.1)	Pass
6.13	Cable installation methods/practices with regard to the type and nature of installation and external influences (Section 522)	Pass
6.14	Where exposed to direct sunlight, cable of a suitable type (522.11.1)	Pass
6.15	Cables concealed under floors, above ceilings, in walls/partitions less than 50 mm from a surface, and in partitions containing metal parts:	
6.15.1	Installed in prescribed zones (see Section 4. Extent and limitations) (522.6.202) or	Pass
6.15.2	Incorporating earthed armour or sheath, or run within earthed wiring system, or otherwise protected against mechanical damage by nails, screws and the like (see Section 4. Extent and limitations) (522.6.204)	Pass
6.16	Provision of fire barriers, sealing arrangements and protection against thermal effects (Section 527)	Pass
6.17	Band II cables segregated/separated from Band I cables (528.1)	Pass
6.18	Cables segregated/separated from non-electrical services (528.3)	Pass
6.19	Condition of circuit accessories (651.2)	C2
6.20	Suitability of circuit accessories for external influences (512.2)	Pass
6.21	Single-pole switching or protective devices in line conductors only (132.14.1; 530.3.3)	Pass
6.22	Adequacy of connections, including cpcs, within accessories and to fixed and stationary equipment – identify/record numbers and locations of items inspected (Section 526)	Pass
6.23	Presence, operation and correct location of appropriate devices for isolation and switching (Chapter 46; Section 537)	Pass
6.24	General condition of wiring systems (651.2)	Pass
6.25	Temperature rating of cable insulation (522.1.1; Table 52.1)	Pass
7.0	FINAL CIRCUITS	
7.1	Identification of conductors (514.3.1)	Pass
7.2	Cables correctly supported throughout their run (521.10.202; 522.8.5)	Pass
7.3	Condition of insulation of live parts (416.1)	Pass

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 (CONTINUED)

Item	Description	Outcome
7.4	Non-sheathed cables protected by enclosure in conduit, ducting or trunking (521.10.1)	Pass
7.5	Suitability of containment systems for continued use (including flexible conduit) (Section 522)	Pass
7.6	Adequacy of cables for current-carrying capacity with regard for the type and nature of installation (Section 523)	Pass
7.7	Adequacy of protective devices: type and rated current for fault protection (411.3)	Pass
7.8	Presence and adequacy of circuit protective conductors (411.3.1.1; 543.1)	Pass
7.9	Co-ordination between conductors and overload protective devices (433.1; 533.2.1)	Pass
7.10	Wiring system(s) appropriate for the type and nature of the installation and external influences (Section 522)	Pass
7.11	Cables concealed under floors, above ceilings, in walls/partitions, adequately protected against damage (522.6.201; 522.6.202; 522.6.203; 522.6.204):	
7.11.1	Installed in prescribed zones (see Section 4. Extent and limitations) (522.6.202)	LIM
7.11.2	Incorporating earthed armour or sheath, or run within earthed wiring system, or otherwise protected against mechanical damage by nails, screws and the like (see Section 4. Extent and limitations) (522.6.201; 522.6.204)	LIM
7.12	Provision of additional protection by 30mA RCD:	
7.12.1	For all socket-outlets of rating 32A or less, unless an exemption is permitted (411.3.3) *	Pass
7.12.2	For the supply of mobile equipment not exceeding 32A rating for use outdoors (411.3.3) *	Pass
7.12.3	For cables concealed in walls at a depth of less than 50mm (522.6.202, 522.6.203) *	Pass
7.12.4	For cables concealed in walls/partitions containing metal parts regardless of depth (522.6.203) *	Pass
7.12.5	For final circuits supplying luminaires within domestic (household) premises (411.3.4) *	N/A
	* Note: Older installations designed prior to BS 7671:2018 may not have been provided with RCDs for additional protection.	
7.13	Provision of fire barriers, sealing arrangements and protection against thermal effects (Section 527)	Pass
7.14	Band II cables segregated/separated from Band I cables (528.1)	Pass
7.15	Cables segregated/separated from non-electrical services (528.3)	Pass
7.16	Termination of cables at enclosures – identify/record numbers and locations of items inspected (Section 526):	
7.16.1	Connections under no undue strain (526.6)	Pass
7.16.2	No basic insulation of a conductor visible outside enclosure (526.8)	Pass
7.16.3	Connections of live conductors adequately enclosed (526.5)	Pass
7.16.4	Adequately connected at point of entry to enclosure (glands, bushes etc.) (522.8.5)	Pass
7.17	Condition of accessories including socket-outlets, switches and joint boxes (651.2)	C2
7.18	Suitability of accessories for external influences (512.2)	Pass
7.19	Single-pole switching or protective devices in line conductors only (132.14.1, 530.3.3)	Pass
8.0	ISOLATION AND SWITCHING	
8.1	Isolators (Sections 460; 537):	
8.1.1	Presence and condition of appropriate devices (Section 462; 537.2.7)	Pass
8.1.2	Acceptable location – state if local or remote from equipment in question (Section 462; 537.2.7)	Pass
8.1.3	Capable of being secured in the OFF position (462.3)	Pass
8.1.4	Correct operation verified (643.10)	Pass
8.1.5	Clearly identified by position and/or durable marking (537.2.6)	Pass
8.1.6	Warning label posted in situations where live parts cannot be isolated by the operation of a single device (514.11.1; 537.1.2)	N/A
8.2	Switching off for mechanical maintenance (Section 464; 537.3.2):	
8.2.1	Presence and condition of appropriate devices (464.1; 537.3.2)	Pass
8.2.2	Acceptable location – state if local or remote from equipment in question (537.3.2.4)	Pass
8.2.3	Capable of being secured in the OFF position (462.3)	Pass
8.2.4	Correct operation verified (643.10)	Pass
8.2.5	Clearly identified by position and/or durable marking (537.3.2.4)	Pass

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 (CONTINUED)

Item	Description	Outcome
8.3	Emergency switching/stopping (Section 465; 537.3.3):	
8.3.1	Presence and condition of appropriate devices (Section 465; 537.3.3; 537.4)	N/A
8.3.2	Readily accessible for operation where danger might occur (537.3.3.6)	N/A
8.3.3	Correct operation verified (643.10)	N/A
8.3.4	Clearly identified by position and/or durable marking (537.3.3.6)	N/A
8.4	Functional switching (Section 463; 537.3.1):	
8.4.1	Presence and condition of appropriate devices (537.3.1.1; 537.3.1.2)	Pass
8.4.2	Correct operation verified (537.3.1.1; 537.3.1.2)	Pass
9.0	CURRENT-USING EQUIPMENT (PERMANENTLY CONNECTED)	
9.1	Condition of equipment in terms of IP rating etc (416.2)	Pass
9.2	Equipment does not constitute a fire hazard (Section 421)	Pass
9.3	Enclosure not damaged/deteriorated so as to impair safety (134.1.1; 416.2; 512.2)	Pass
9.4	Suitability for the environment and external influences (512.2)	Pass
9.5	Security of fixing (134.1.1)	Pass
9.6	Cable entry holes in ceiling above luminaires, sized or sealed so as to restrict the spread of fire: List number and location of luminaires inspected (separate page) (527.2)	Pass
9.7	Recessed luminaires (downlighters):	
9.7.1	Correct type of lamps fitted (559.3.1)	N/A
9.7.2	Installed to minimise build-up of heat by use of 'fire rated' fittings, insulation displacement box or similar (421.1.2)	N/A
9.7.3	No signs of overheating to surrounding building fabric (559.4.1)	N/A
9.7.4	No signs of overheating to conductors/terminations (526.1)	N/A
10.0	LOCATION(S) CONTAINING A BATH OR SHOWER	
10.1	Additional protection for all low voltage (LV) circuits by RCD not exceeding 30mA (701.411.3.3)	N/A
10.2	Where used as a protective measure, requirements for SELV or PELV met (701.414.4.5)	N/A
10.3	Shaver supply units comply with BS EN 61558-2-5 formerly BS 3535 (701.512.3)	N/A
10.4	Presence of supplementary bonding conductors, unless not required by BS 7671:2018 (701.415.2)	N/A
10.5	Low voltage (e.g. 230 V) socket-outlets sited at least 2.5m from zone 1 (701.512.3)	N/A
10.6	Suitability of equipment for external influences for installed location in terms of IP rating (701.512.2)	N/A
10.7	Suitability of accessories and controlgear etc. for a particular zone (701.512.3)	N/A
10.8	Suitability of current-using equipment for particular position within the location (701.55)	N/A
11.0	OTHER PART 7 SPECIAL INSTALLATIONS OR LOCATIONS List all other special installation or locations present, if any. (Record separately the results of particular inspections)	
11.1	N/A	N/A
11.2	N/A	N/A
11.3	N/A	N/A
11.4	N/A	N/A
11.5	N/A	N/A
12.0	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.	
12.1	N/A	N/A
12.2	N/A	N/A
12.3	N/A	N/A
12.4	N/A	N/A
12.5	N/A	N/A

Inspected by:

Name: SCOTT GILBERT Position: Electrical Technician Signature: Date: 20/09/2023

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 (MEMSHIELD 3) Location: OUTSIDE ENCLOSURE AT THE END OF THE SHOOTING RANG Supplied from: Origin

Distribution circuit OCPD: BS (EN): SUPPLY CUT-OUT Type: LIM Rating/Setting: LIM A No of phases: 3

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

Confirmation of supply polarity ✔ Confirmation of phase sequence ✔ Zs at DB: 13.74Ω Ipf at DB: 1.6 kA

SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

CIRCUIT DETAILS																TEST RESULT DETAILS														
		Conductor details						Overcurrent protective device					RCD				Continuity (Ω)					Insulation resistance				Zs	RCD		AFDD
					Number and size												Ring final circuit			R_1+R_2 or R_2										
Circuit number	Circuit description	Type of wiring	Reference method	Number of points served	Live (mm²)	cpc (mm²)	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)	r_1 (line)	r_n (neutral)	r_2 (cpc)	R_1+R_2	R_2	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)
1 L1	" "																					500	> 200	> 200					
1 L2	WERNICK BUILDING (NOT INCLUDED IN TEST)																					500	> 200	> 200					
1 L3	" "																					500	> 200	> 200					
2 L1	SPARE																												
2 L2	SPARE																												
2 L3	SPARE																												
3 L1	SPARE																												
3 L2	SPARE																												
3 L3	SPARE																												

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

DETAILS OF TEST INSTRUMENTS

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

Multi-functional: 2745002 Insulation resistance: - Continuity: -

Earth electrode resistance: - Earth fault loop impedance: - RCD: -

TESTED BY

Name: MR S. GILBERT Position: ELECTRICIAN Signature: S.Gilbert Date: 20/09/2023

SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

DB reference: DB 1 (MEMSHIELD 3) Location: OUTSIDE ENCLOSURE AT THE END OF THE SHOOTING RANG Supplied from: Origin

CIRCUIT DETAILS																	TEST RESULT DETAILS																		
		Conductor details						Overcurrent protective device					RCD				Continuity (Ω)					Insulation resistance				Z_s	RCD		AFDD
					Number and size												Ring final circuit			R_1+R_2 or R_2														
Circuit number	Circuit description	Type of wiring	Reference method	Number of points served	Live (mm^2)	cpc (mm^2)	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)	r_1 (line)	r_n (neutral)	r_2 (cpc)	R_1+R_2	R_2	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)
4 L1	SPARE																																	
4 L2	SPARE																																	
4 L3	SPARE																																	
5 L1	SPARE																																	
5 L2	SPARE																																	
5 L3	SPARE																																	
6 L1	SPARE																																	
6 L2	GARAGE	F	C	1	10	10	1	61009	C	45	10	1667	61009	A	30	45	N/A	N/A	N/A	0.12	N/A	500	>500	>500	✔	13.86	17.6	✔	N/A
6 L3	SHOOTING RANGE	O	C	1	16	16	1	61009	B	40	10	1667	61009	A	30	40	N/A	N/A	N/A	0.05	N/A	500	>500	>500	✔	13.79	17.6	✔	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	SPLIT CONCENTRIC

DISTRIBUTION BOARD DETAILS

DB reference: DB SHOOTING RANGE (OLD HAGER) Location: SHOOTING RANGE ADJACENT DOOR Supplied from: D/B 1 CCT 6L3

Distribution circuit OCPD: BS (EN): 61009 Type: B Rating/Setting: 40 A No of phases: 1

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

Confirmation of supply polarity ✔ Confirmation of phase sequence N/A Zs at DB: 14.51Ω Ipf at DB: 2.7 kA

SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

CIRCUIT DETAILS																	TEST RESULT DETAILS																
		Conductor details						Overcurrent protective device					RCD				Continuity (Ω)					Insulation resistance				Zs	RCD		AFDD				
					Number and size												Ring final circuit			R_1+R_2 or R_2												
Circuit number	Circuit description	Type of wiring	Reference method	Number of points served	Live (mm²)	cpc (mm²)	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)	r_1 (line)	r_n (neutral)	r_2 (cpc)	R_1+R_2	R_2	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)
RCD 80A 100ma AC TYPE (4 MODULE)																																
1	SPARE																															
2	TSSO NEXT TO D/B	B	A	1	4	2.5	0.2	3871	2	16	6	1.56	61009	A	30	40	N/A	N/A	N/A	0.12	N/A	500	>500	>500	✔	14.63	19.9	✔	N/A
3	HEATER POINT NEAR D/B	B	A	1	4	2.5	0.2	3871	2	16	6	1667	61009	A	30	40	N/A	N/A	N/A	0.14	N/A	500	>500	>500	✔	14.65	19.9	✔	N/A
4	HEATER POINT OPPOSITE D/B	B	A	1	4	2.5	0.2	3871	2	16	6	1667	61009	A	30	40	N/A	N/A	N/A	0.11	N/A	500	>500	>500	✔	14.62	19.9	✔	N/A
5	LIGHTS SHOOTING END	B	A	4	1.5	1.5	0.2	3871	2	6	6	1667	61009	A	30	40	N/A	N/A	N/A	0.60	N/A	500	LIM	403	✔	15.11	19.9	✔	N/A
6	OUTSIDE LIGHT	B	A	1	1.5	1.5	0.2	3871	2	6	6	1667	61009	A	30	40	N/A	N/A	N/A	0.16	N/A	500	LIM	75.3	✔	14.67	19.9	✔	N/A
7	UNKNOWN CIRCUIT (TRACED CABLE TO ARMOURY WHHICH WE HAD NO ACCESS TO)	A	B	LIM	2.5	1.5	0.2	60898	B	16	6	1667	61009	A	30	40	N/A	N/A	N/A	LIM	LIM	500	LIM	>500	LIM	LIM	19.9	✔	N/A
8	FANS	B	A	4	1.5	1.5	0.2	3871	2	6	6	1667	61009	A	30	40	N/A	N/A	N/A	0.50	N/A	500	>500	>500	✔	15.01	19.9	✔	N/A

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

DETAILS OF TEST INSTRUMENTS

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

Multi-functional: 2745002 Insulation resistance: - Continuity: -

Earth electrode resistance: - Earth fault loop impedance: - RCD: -

TESTED BY

Name: SCOTT GILBERT Position: Electrical Technician Signature: Date: 20/09/2023

SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

DB reference: DB SHOOTING RANGE (OLD HAGER) Location: SHOOTING RANGE ADJACENT DOOR Supplied from: D/B 1 CCT 6L3

CIRCUIT DETAILS																	TEST RESULT DETAILS														
		Conductor details						Overcurrent protective device					RCD				Continuity (Ω)					Insulation resistance				Z_s	RCD		AFDD
					Number and size												Ring final circuit			R_1+R_2 or R_2										
Circuit number	Circuit description	Type of wiring	Reference method	Number of points served	Live (mm^2)	cpc (mm^2)	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)	r_1 (line)	r_n (neutral)	r_2 (cpc)	R_1+R_2	R_2	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)
9	HALOGEN LIGHTS TARGET END	B	A	3	1.5	1.5	0.2	3871	2	6	6	1667	61009	A	30	40	N/A	N/A	N/A	0.62	N/A	500	LIM	227	✔	15.13	19.9	✔	N/A
CONTACTOT FOR TARGET LIGHTS FROM LOWER DOOR SWITCH																													

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 non metallic conduit	Thermoplastic cables in metallic trunking	Thermoplastic cables in non metallic trunking	Thermoplastic /SWA cables	Thermosetting /SWA cables	Mineral insulated cables	N/A

DISTRIBUTION BOARD DETAILS

DB reference: DB GARAGE | Location: REAR OF GARAGE | Supplied from: D/B 1 CCT 6L2

Distribution circuit OCPD: BS (EN): 61009 | Type: C | Rating/Setting: 45 A | No of phases: 1

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

Confirmation of supply polarity ✔ | Confirmation of phase sequence N/A | Zs at DB: 19.49Ω | Ipf at DB: 0.99 kA

SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

CIRCUIT DETAILS																TEST RESULT DETAILS														
		Conductor details						Overcurrent protective device					RCD				Continuity (Ω)					Insulation resistance				Zs	RCD		AFDD
					Number and size												Ring final circuit			R_1+R_2 or R_2									
Circuit number	Circuit description	Type of wiring	Reference method	Number of points served	Live (mm²)	cpc (mm²)	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)	r_1 (line)	r_n (neutral)	r_2 (cpc)	R_1+R_2	R_2	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)
1	HEATER 1	A	B	1	2.5	1.5	0.2	60898	B	16	10	1667	61009	A	30	45	N/A	N/A	N/A	0.59	N/A	500	>500	>500	✔	20.08	14.6	✔	N/A
2	HEATER 2	A	B	1	2.5	1.5	0.2	60898	B	16	10	1667	61009	A	30	45	N/A	N/A	N/A	0.21	N/A	500	>500	>500	✔	19.7	14.6	✔	N/A
3	HEATER 3	A	B	1	2.5	1.5	0.2	60898	B	16	10	1667	61009	A	30	45	N/A	N/A	N/A	0.27	N/A	500	>500	>500	✔	19.76	14.6	✔	N/A
4	HEATER 4 + TIMER SWITCH	A	B	2	2.5	1.5	0.2	60898	B	16	10	1667	61009	A	30	45	N/A	N/A	N/A	0.34	N/A	500	>500	>500	✔	19.83	14.6	✔	N/A
5	SOCKETS	A	B	2	2.5	1.5	0.2	61009	B	16	10	1667	61009	A	30	16	N/A	N/A	N/A	0.41	N/A	500	>500	>500	✔	19.9	16.9	✔	N/A
6	LIGHTS (DISCONNECTED AT TIME OF TEST)	-	-	-	-	--	0.2	60898	B	6	10	1667	61009	A	30	45	N/A	N/A	N/A	-	-	-	-	-	N/A	-	-	✔	N/A
7	SPARE																												
8	SPARE																												
9	SPARE																												

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: 2745002 | Insulation resistance: - | Continuity: -

Earth electrode resistance: - | Earth fault loop impedance: - | RCD: -

TESTED BY

Name: MR S. GILBERT | Position: ELECTRICIAN | Signature:  | Date: 20/09/2023

SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

DB reference: DB GARAGE | Location: REAR OF GARAGE | Supplied from: D/B 1 CCT 6L2

CIRCUIT DETAILS																	TEST RESULT DETAILS																			
		Conductor details						Overcurrent protective device					RCD				Continuity (Ω)					Insulation resistance				Z_s	RCD		AFDD							
					Number and size												Ring final circuit			R_1+R_2 or R_2																	
Circuit number	Circuit description	Type of wiring	Reference method	Number of points served	Live (mm²)	cpc (mm²)	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)	r_1 (line)	r_n (neutral)	r_2 (cpc)	R_1+R_2	R_2	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)							
10	SPARE																																				
11	SPARE																																				
12	SPARE																																				
13	SPARE																																				
14	SPARE																																				
15	SPARE																																				
16	SPARE																																				

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 non metallic conduit	Thermoplastic cables in metallic trunking	Thermoplastic cables in non metallic trunking	Thermoplastic /SWA cables	Thermosetting /SWA cables	Mineral insulated cables	N/A

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 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 FI) 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.