Electrical Installation Condition Report

Unique Certificate No. YEE-000035-EICR

To comply with:

BS 7671: 2018 (Amendment 1: 2020)
Requirement for Electrical Installations
IET Wiring Regulations Eighteenth Edition

42 Whernside Avenue
Tang Hall
York
North Yorkshire
YO31 0PT

Electrical verification undertaken for:	Blades Properties
Date inspected:	26 July 2022
Overall assessment:	**Satisfactory**

Electrical specification presented by:

Yorkshire Elite Electrical LTD

Suite 3
14 Market Place
Pocklington
York
North Yorkshire
YO42 2AR
☎ 01904 373114

Contents of the Report

Unique Certificate No. YEE-000035-EICR

ELECTRICAL INSTALLATION CONDITION REPORT

This safety certificate is an important and valuable document which should be retained for future reference

Issued in accordance with BS 7671 - Requirements for Electrical Installations

DETAILS OF THE CLIENT

Client:	Blades Properties	Contract Ref (if any):	
Address:			
4 Hillgarth Court, Elvington, York, North Yorkshire, YO41 4BD			

REASON FOR PRODUCING THIS REPORT

To ascertain current condition of electrical installation	
Date(s) on which inspection and testing was carried out	26 July 2022

DETAILS OF THE INSTALLATION WHICH IS THE SUBJECT OF THIS REPORT

Occupier:	The Occupier	Description of premises:	Domestic
Address:	42 Whernside Avenue, Tang Hall, York, North Yorkshire, YO31 0PT	Estimated age of wiring system:	30 years
		Evidence of additions / alterations:	Yes
		If yes, estimate age:	5 years
Date of last inspection:	01 September 2017	Electrical Installation Certificate No or previous Electrical Installation Condition Report No:	
Installation records available:	N/A	Records held by:	

EXTENT OF THE INSTALLATION

Extent of the installation covered by this certificate:

Visual and full electrical verification

LIMITATIONS OF THE INSPECTION AND TESTING

Agreed limitations including the reasons (See Regulation 634.2):

N/A

Agreed with:	N/A

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 (Amendment 1: 2020).

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.

SUMMARY OF THE CONDITION OF THE INSTALLATION

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

Good

Overall assessment of the installation in terms of its suitability for continued use:	Satisfactory

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

RECOMMENDATIONS

Where the overall assessment of the suitability of the installation for continued use above Is stated as UNSATISFACTORY, I/we recommend that any observations classified as 'Danger present' (Code C1) or 'Potentially dangerous' (Code C2) are acted upon as a matter or urgency.

Investigation without delay is recommended for observations identified as 'Further investigation required' (code FI).

Observations classified as 'Improvement recommended' (Code C3) should be given due consideration.

It is recommended that the installation is further inspected & tested:	before 26 July 2027
For the following reason:	Rental Property

DECLARATION

I/We being the person(s) responsible for the inspection & 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 & 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 extent and limitations stated in this report.

INSPECTED AND TESTED BY:

Name	Lewis Rennison	For & on behalf of:	Yorkshire Elite Electrical LTD
Position	Electrician	Address:	Suite 3 14 Market Place Pocklington York North Yorkshire YO42 2AR 01904 373114 Lewis@YorkshireEliteElectrical.co.uk
Date	26 July 2022		
Signature			
Enrolment No.:	64207 Branch No.:	Accredited Body:	NAPIT

REPORT AUTHORISED FOR ISSUE BY:

Name	Lewis Rennison	For & on behalf of:	Yorkshire Elite Electrical LTD
Position	Electrician	Address	Suite 3 14 Market Place Pocklington York North Yorkshire YO42 2AR 01904 373114 Lewis@YorkshireEliteElectrical.co.uk
Date	26 July 2022		
Signature			
Enrolment No.:	64207 Branch No.:	Accredited Body:	NAPIT

SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS

System type and earthing arrangements	TN-S	✓	TN-C-S		TT		TN-C		IT	
Number and Type of Live Conductors	A.C./D.C.	A.C.	No. of phases	1-Phase (2-wire)						

Nature of Supply Parameters

Nominal voltage(s), U_0	230V	Nominal frequency, f	50Hz	Number of supplies	1	Phase sequence confirmed:	N/A
U	N/A	External earth fault loop impedance, Z_e	0.14Ω	Prospective fault current, I_{pf}	1.70kA	Supply polarity confirmed:	✓
Primary Supply Overcurrent Protective Device(s)	LIM N/A			Rated current	LIM	Short-circuit capacity	LIM

Other sources of supply:

N/A

PARTICULARS Of INSTALLATION AT THE ORIGIN

Means of earthing	Supplier's facility	Maximum Demand (Load):	LIM
Method of Fault Protection	ADS		

Main Protective Conductors

Earthing Conductor	Conductor material	Copper	Conductor csa	16mm²	Continuity check	✓
Main protective bonding conductors	Conductor material	Copper	Conductor csa	10mm²	Continuity check	✓
Bonding of extraneous-conductive parts	Water installation pipes:	✓	Gas installation pipes:	✓	Oil service:	N/A
	Structural steel:	N/A	Lightning protection:	N/A	N/A	N/A

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

Location	DB1			BS(EN)	BS EN 60947-3 N/A		
	No. of poles	2		Rated voltage	415V	Rated current	100A
	Fuse rating or setting	N/A		Conductors material	Copper	Conductors csa	2 x 25mm²

Front End Residual Current Device details (if applicable):

RCD type	N/A	Operating current $I_{\Delta n}$	N/A	Operating time @ $I_{\Delta n}$	N/A	Type 'S' RCD (time delayed)	N/A

INSPECTION SUMMARY

Item No.	Description	Outcome	Item No.	Description	Outcome
1.0	Distributor's (DNO) Supply intake equipment (VISUAL INSPECTION ONLY)	Pass	5.0	Final circuits	LIM
2.0	Presence of adequate arrangements for other sources such as micro-generators	N/A	6.0	Location(s) containing a bath or shower	Pass
			7.0	Other part 7 special installations or locations	N/A
3.0	Earthing & bonding arrangements	Pass	8.0	Not covered by any BS7671 Inspection Schedule section	Pass
4.0	Consumer unit(s) / Distribution board(s)	Pass			

EICR Inspection Schedule

If the schedule item applies to a particular board or circuit, this is shown in the 'Location' column. Further detail can be found in the 'Observations' section.

Item No	Description	Outcome	Location
1	Distributor's (DNO) Supply intake equipment (VISUAL INSPECTION ONLY)		
1.1	Condition of service cable	✓	
1.2	Condition of service head	✓	
1.3	Condition of distributor's earthing arrangement	✓	
1.4	Condition of meter tails - distributor or consumer	✓	
1.5	Condition of metering equipment	✓	
1.6	Condition of isolator (where present)	N/A	
1.	Distributor's (DNO) Supply intake equipment - general observation	✓	
2	Presence of adequate arrangements for other sources such as micro-generators		
2.	Presence of adequate arrangements for other sources such as micro-generators (551.6; 551.7)	N/A	
3	Earthing & bonding arrangements		
3.1	Presence and condition of distributor's earthing arrangement (542.1.2.1; 542.1.2.2)	✓	
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)	✓	
3.4	Confirmation of earthing conductor size (542.3; 543.1.1)	✓	
3.5	Accessibility and condition of earthing conductor at MET (543.3.2)	✓	
3.6	Confirmation of main protective bonding conductor sizes (544.1)	✓	
3.7	Condition and accessibility of main protective bonding conductor connections (543.3.2; 544.1.2)	✓	
3.8	Accessibility and condition of other protective bonding connections (543.3.1; 543.3.2)	✓	
3.	Earthing & bonding arrangements - not covered by any BS7671 item in Section 3	✓	
4	Consumer unit(s) / Distribution board(s)		
4.1	Adequacy of working space/accessibility to consumer unit/distribution board (132.12; 513.1)	✓	
4.2	Security of fixing (134.1.1)	✓	
4.3	Condition of enclosure(s) in terms of IP rating etc (416.2)	✓	
4.4	Condition of enclosure(s) in terms of fire rating etc (421.1.201; 526.5)	C3 - Improvement recommended	Installation
4.5	Enclosure not damaged/deteriorated so as to impair safety (651.2)	✓	
4.6	Presence of main linked switch (as required by 462.1.201)	✓	
4.7	Operation of main switch (functional check) (643.10)	✓	
4.8	Manual operation of circuit-breakers and RCDs to prove disconnection (643.10)	✓	
4.9	Correct identification of circuit details and protective devices (514.8.1; 514.9.1)	✓	
4.10	Presence of RCD six-monthly test notice at or near consumer unit/distribution board (514.12.2)	✓	
4.11	Presence of non-standard (mixed) cable colour warning notice at or near consumer unit/distribution board (514.14)	✓	
4.12	Presence of alternative supply warning notice at or near consumer unit/distribution board (514.15)	N/A	
4.13	Presence of other required labelling (please specify) (Section 514)	N/A	
4.14	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)	✓	
4.15	Single-pole switching or protective devices in line conductor only (132.14.1; 530.3.3)	✓	
4.16	Protection against mechanical damage where cables enter consumer unit/distribution board (132.14.1; 522.8.1; 522.8.5; 522.8.11)	✓	
4.17	Protection against electromagnetic effects where cables enter consumer unit/distribution board/enclosures (521.5.1)	✓	
4.18	RCD(s) provided for fault protection - includes RCBOs (411.4.204; 411.5.2; 531.2)	✓	
4.19	RCD(s) provided for additional protection/requirements - includes RCBOs (411.3.3; 415.1)	✓	
4.20	Confirmation of indication that SPD is functional (651.4)	C3 - Improvement recommended	Installation
4.21	Confirmation that ALL conductor connections, including connections to busbars, are correctly located in terminals and are tight and secure (526.1)	✓	
4.22	Adequate arrangements where a generating set operates as a switched alternative to the public supply (551.6)	N/A	

Item No	Description	Outcome	Location
4.23	Adequate arrangements where a generating set operates in parallel with the public supply (551.7)	N/A	
4.	Consumer unit(s) / Distribution board(s) - not covered by any BS7671 item in Section 4	✓	
5	Final circuits		
5.1	Identification of conductors (514.3.1)	✓	
5.2	Cables correctly supported throughout their run (521.10.202; 522.8.5)	✓	
5.3	Condition of insulation of live parts (416.1)	✓	
5.4	Non-sheathed cables protected by enclosure in conduit, ductling or trunking (to include the integrity of conduits and trunking systems, both metal and plastic) (521.10.1)	✓	
5.5	Adequacy of cables for current-carrying capacity with regard for the type and nature of installation (Section 523)	✓	
5.6	Coordination between conductors and overload protective devices (433.1; 533.2.1)	✓	
5.7	Adequacy of protective devices: type and rated current for fault protection (411.3)	✓	
5.8	Presence and adequacy of circuit protective conductors (411.3.1; Section 543)	✓	
5.9	Wiring system(s) appropriate for the type and nature of the installation and extemal influences (Section 522)	✓	
5.10	Concealed cables installed in prescribed zones (refer to: Extent and Limitations) (522.6.202)	LIM - Limitation	Installation
5.11	Cables concealed under floor, above ceilings, or in walls/partitions, adequately protected against mechanical damage (refer to: Extent and Limitations) (522.6.204)	LIM - Limitation	Installation
5.12.1	Provision of additional requirements for protection by RCD not exceeding 30 mA for all socket-outlets of rating 32 A or less, unless an exception is permitted (411.3.3)	✓	
5.12.2	Provision of additional requirements for protection by RCD not exceeding 30 mA for the supply of mobile equipment not exceeding 32 A rating for use outdoors (411.3.3)	✓	
5.12.3	Provision of additional requirements for protection by RCD not exceeding 30 mA for cables concealed in walls at a depth of less than 50 mm (522.6.202; 522.6.203)	✓	
5.12.4	Provision of additional requirements for protection by RCD not exceeding 30 mA for cables concealed in walls/partitions containing metal parts regardless of depth (522.6.203)	✓	
5.12.5	Provision of additional requirements for protection by RCD not exceeding 30 mA for final circuits supplying luminaires within domestic (household) premises (411.3.4)	✓	
5.13	Provision of fire barriers, sealing arrangements and protection against thermal effects (Section 527)	✓	
5.14	Band II cables segregated/separated from Band I cables (528.1)	✓	
5.15	Cables segregated/separated from communications cabling (528.2)	✓	
5.16	Cables segregated/separated from non-electrical services (528.3)	✓	
5.17.1	Termination of cables at enclosures - indicate extent of sampling in Extent & Limitations of the report (Section 526); Connections soundly made and under no undue strain (526.6)	✓	
5.17.2	Termination of cables at enclosures - indicate extent of sampling in Extent & Limitations of the report (Section 526); No basic insulation of a conductor visible outside enclosure (526.8)	✓	
5.17.3	Termination of cables at enclosures - indicate extent of sampling in Extent & Limitations of the report (Section 526); Connection of live conductors adequately enclosed (526.5)	✓	
5.17.4	Termination of cables at enclosures - indicate extent of sampling in Extent & Limitations of the report (Section 526); Adequately connected at point of entry to enclosure (glands, bushes etc.) (522.8.5)	✓	
5.18	Condition of accessories including socket-outlets, switches and joint boxes (651.2(v))	✓	
5.19	Suitability of accessories for external influences (512.2)	✓	
5.20	Adequacy of working space/accessibility to equipment (132.12; 513.1)	✓	
5.21	Single-pole switching or protective devices in line conductors only (132.14.1, 530.3.3)	✓	
5.22	Provision of relevant certification confirming that the electrical installation, or alteration, has been inspected and verified in accordance with Chapter 64	✓	
5.	Final circuits - not covered by any BS7671 item in Section 5	✓	
6	Location(s) containing a bath or shower		
6.1	Additional protection for all low voltage (LV) circuits by RCD not exceeding 30 mA (701.411.3.3)	✓	
6.2	Where used as a protective measure, requirements for SELV or PELV met (701.414.4.5)	N/A	
6.3	Shaver sockets comply with BS EN 61558-2-5 formerly BS 3535 (701.512.3)	N/A	
6.4	Presence of supplementary bonding conductors, unless not required by BS 7671:2018 (701.415.2)	✓	
6.5	Low voltage (e.g. 230 volt) socket-outlets sited at least 3 m from zone 1 (701.512.3)	✓	
6.6	Suitability of equipment for extemal influences for installed location in terms of IP rating (701.512.2)	✓	
6.7	Suitability of accessories and controlgear etc. for a particular zone (701.512.3)	✓	
6.8	Suitability of current-using equipment for particular position within the location (701.55)	✓	
6.	Location(s) containing a bath or shower - not covered by any BS7671 item in Section 6	✓	
7	Other part 7 special installations or locations		

Item No	Description	Outcome	Location
7.1	List all other special installations or locations present, if any (record separately the results of particular installations applied)	N/A	
8	Not covered by any BS7671 Inspection Schedule section		
8.	Not covered by any BS7671 Inspection Schedule section	✓	

Observations

C3 - Improvement recommended

Electrical switchgear or enclosure inadequately fire-rated

Schedule Item contravened:
4.4 - Condition of enclosure(s) in terms of fire rating etc (421.1.201; 526.5)

C3 - Improvement recommended

Lack of SPD

Schedule Item contravened:
4.20 - Confirmation of indication that SPD is functional (651.4)

Distribution Schedule: DB 001

DB Location:	Under Stairs	Supply Derived From:	Main supply	Primary Overcurrent Device:	LIM N/A
DB Type/No:	Moeller 1Ø Distribution Board (SinglePole & Neutral)	Voltage:	230V	OPD Current Rating	LIM
Designation:	Lighting & Power	No. of phases:	1	OPD Short circuit capacity	LIMkA
Tested by:	Lewis Rennison	Signature		Date	26 July 2022

Circuit	Circuit Description	Type of wiring	Reference Method	No. of points	Circuit Conductors		Max disconnection time perm	Protective device				Max Permitted Earth Loop	RCD				
					Live	CPC		BS (EN)	Type	Rating	Breaking capacity		BS (EN)	Type	Rating	$I_{\Delta n}$	No. of poles
1	Water Heater	PVC T&E	100	2	2.5mm²	1.5mm²	0.4s	61009	B	20A	6kA	2.19Ω	61009	AC	20A	30mA	2
2	Garage	PVC/SWA	C	1	2.5mm²	1.5mm²	0.4s	61009	B	20A	6kA	2.19Ω	61009	AC	20A	30mA	2
3	Sockets	PVC T&E	100	7	4.0mm²	2.5mm²	0.4s	61009	B	20A	6kA	2.19Ω	61009	AC	20A	30mA	2
4	Sockets	PVC T&E	100	3	2.5mm²	1.5mm²	0.4s	61009	B	20A	6kA	2.19Ω	61009	AC	20A	30mA	2
5	Sockets	PVC T&E	100	11	4.0mm²	2.5mm²	0.4s	61009	B	20A	6kA	2.19Ω	61009	AC	20A	30mA	2
6	Sockets	PVC T&E	100	2	4.0mm²	2.5mm²	0.4s	61009	B	20A	6kA	2.19Ω	61009	AC	20A	30mA	2
7	Cooker	PVC T&E	100	1	4.0mm²	2.5mm²	0.4s	61009	B	32A	6kA	1.37Ω	61009	AC	32A	30mA	2
8	Shower	PVC T&E	100	1	4.0mm²	2.5mm²	0.4s	61009	B	32A	6kA	1.37Ω	61009	AC	32A	30mA	2
9	Lighting	PVC T&E	100	6	1.0mm²	1.0mm²	0.4s	61009	B	6A	6kA	7.28Ω	61009	AC	6A	30mA	2
10	Lighting & Em Lighting	PVC T&E	100	33	1.0mm²	1.0mm²	0.4s	61009	B	6A	6kA	7.28Ω	61009	AC	6A	30mA	2
11	Security Alarm	PVC T&E	100	-------	1.0mm²	1.0mm²	0.4s	61009	B	6A	6kA	7.28Ω	61009	AC	6A	30mA	2
12	Smoke Alarm	PVC T&E	100	11	1.0mm²	1.0mm²	0.4s	61009	B	6A	6kA	7.28Ω	61009	AC	6A	30mA	2
13	Spare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-------	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14	Spare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-------	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15	Spare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-------	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16	Spare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-------	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17	Kitchen Sockets	PVC T&E	100	7	2.5mm²	1.5mm²	0.4s	61009	C	32A	6kA	0.68Ω	61009	AC	32A	30mA	2

Test Results: DB 001

Phase sequence confirmed:	N/A	Z_s at DB:	0.14Ω	Vulnerable circuits and/or installed equipment:	RCBO's
Supply polarity confirmed:	✓	I_{pf} at DB:	1.70kA		

Details of Test Instruments Used					
Continuity:	Megger	Insulation resistance:	Megger	Earth fault loop impedance:	Megger
RCD:	Megger	Earth electrode resistance:	Megger		

Circuit	Circuit Description	Ring Final Circuit Continuity			Continuity		Insulation Resistance Test Voltage	Insulation Resistance			Polarity	Max Measured Earth Loop	RCD Test Results				Manual AFDD test button operation
		r_1 (line)	r_n (neutral)	r_2 (cpc)	$R_1 + R_2$	R_2		Live-Live	Live-Neutral	Live-Earth			Test Button	No trip at ½$I_{\Delta n}$	Op time at $I_{\Delta n}$	Op time at 5$I_{\Delta n}$	
1	Water Heater	N/A	N/A	N/A	0.13Ω	N/A	500V	N/A	>999MΩ	>999MΩ	✓	0.27Ω	Pass	No trip	37.9ms	28.1ms	N/A
2	Garage	N/A	N/A	N/A	0.19Ω	N/A	500V	N/A	>999MΩ	>999MΩ	✓	0.33Ω	Pass	No trip	27.1ms	28.1ms	N/A
3	Sockets	N/A	N/A	N/A	0.24Ω	N/A	500V	N/A	>999MΩ	>999MΩ	✓	0.38Ω	Pass	No trip	27.6ms	28.0ms	N/A
4	Sockets	N/A	N/A	N/A	0.09Ω	LIM	500V	N/A	>999MΩ	>999MΩ	✓	0.25Ω	Pass	No trip	27.7ms	28.1ms	N/A
5	Sockets	N/A	N/A	N/A	0.29Ω	N/A	500V	N/A	>999MΩ	>999MΩ	✓	0.43Ω	Pass	No trip	27.2ms	28.4ms	N/A
6	Sockets	N/A	N/A	N/A	0.29Ω	N/A	500V	N/A	>999MΩ	>999MΩ	✓	0.43Ω	Pass	No trip	38.0ms	28.2ms	N/A
7	Cooker	N/A	N/A	N/A	0.02Ω	N/A	500V	N/A	>999MΩ	>999MΩ	✓	0.15Ω	Pass	No trip	28.1ms	28.2ms	N/A
8	Shower	N/A	N/A	N/A	0.08Ω	N/A	500V	N/A	>999MΩ	>999MΩ	✓	0.22Ω	Pass	No trip	28.0ms	28.2ms	N/A
9	Lighting	N/A	N/A	N/A	0.27Ω	N/A	500V	N/A	>999MΩ	>999MΩ	✓	0.51Ω	Pass	No trip	28.1ms	18.1ms	N/A
10	Lighting & Em Lighting	N/A	N/A	N/A	1.17Ω	N/A	500V	N/A	>999MΩ	>999MΩ	✓	1.31Ω	Pass	No trip	27.8ms	18.1ms	N/A
11	Security Alarm	N/A	N/A	N/A	0.32Ω	N/A	500V	N/A	>999MΩ	>999MΩ	✓	0.46Ω	Pass	No trip	28.2ms	18.4ms	N/A
12	Smoke Alarm	N/A	N/A	N/A	0.84Ω	N/A	500V	N/A	>999MΩ	>999MΩ	✓	0.98Ω	Pass	No trip	27.6ms	15.8ms	N/A
13	Spare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14	Spare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15	Spare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16	Spare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17	Kitchen Sockets	0.13Ω	0.14Ω	0.37Ω	0.24Ω	N/A	500V	N/A	>999MΩ	>999MΩ	✓	0.37Ω	Pass	No trip	34.2ms	14.3ms	N/A

Distribution Schedule: DB 002

DB Location:	Garage	Supply Derived From:	DB 001 - 2	Supply Overcurrent Device BSEN:	61009
DB Type/No:	Fusebox 1Ø Distribution Board (SinglePole & Neutral)	Voltage:	230V	Supply Overcurrent Device Type:	B
Designation:	Lighting & Power	No. of phases:	1	Supply Overcurrent Device Rating:	20A
Tested by:	Lewis Rennison	Signature		Date	26 July 2022

Circuit	Circuit Description	Type of wiring	Reference Method	No. of points	Circuit Conductors		Max disconnection time perm	Protective device				Max Permitted Earth Loop	RCD				
					Live	CPC		BS (EN)	Type	Rating	Breaking capacity		BS (EN)	Type	Rating	$I_{\Delta n}$	No. of poles
1	Sockets	PVC T&E	B	3	2.5mm²	1.5mm²	0.4s	60898	B	16A	6kA	2.73Ω	61009	AC	20A	30mA	2
2	Lights	PVC T&E	B	3	1.0mm²	1.0mm²	0.4s	60898	B	6A	6kA	7.28Ω	61009	AC	20A	30mA	2

Test Results: DB 002

Phase sequence confirmed:	N/A	Z_s at DB:	0.33Ω	Vulnerable circuits and/or installed equipment:	N/A
Supply polarity confirmed:	✓	I_{pf} at DB:	0.70kA		

Details of Test Instruments Used					
Continuity:	Megger	Insulation resistance:	Megger	Earth fault loop impedance:	Megger
RCD:	Megger	Earth electrode resistance:	Megger		

Circuit	Circuit Description	Ring Final Circuit Continuity			Continuity		Insulation Resistance Test Voltage	Insulation Resistance			Polarity	Max Measured Earth Loop	RCD Test Results				Manual AFDD test button operation
		r_1 (line)	r_n (neutral)	r_2 (cpc)	$R_1 + R_2$	R_2		Live-Live	Live-Neutral	Live-Earth			Test Button	No trip at ½$I_{\Delta n}$	Op time at $I_{\Delta n}$	Op time at 5$I_{\Delta n}$	
1	Sockets	N/A	N/A	N/A	0.37Ω	N/A	500V	N/A	>999MΩ	>999MΩ	✓	0.70Ω	Pass	No trip	27.1ms	28.1ms	N/A
2	Lights	N/A	N/A	N/A	0.50Ω	N/A	500V	N/A	>999MΩ	>999MΩ	✓	0.83Ω	Pass	No trip	27.1ms	28.1ms	N/A

Condition Report

Guidance for Recipients

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 'Summary of the Condition of the Installation'). The Report should identify any damage, deterioration, defects and/or conditions which may give rise to danger (see Observations section).

2. The person ordering the Report should have received the 'original' Report and the inspector should have retained a duplicate.

3. 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.

4. Where the installation incorporates a residual current device (RCD) there should be a notice at, or near the device, stating that it should be tested six-monthly. For safety reasons it is important that this instruction is followed.

5. The Extent and Limitations of Inspection and Testing section 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 D.

7. For items classified in the Observations section as C I (' 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 the Observations section as C2 ('Potentially dangerous'), the safety of those using the installation may be 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 the Observations section that an observation requires further investigation (code FI) the inspection has revealed an apparent deficiency which may result in a code C l 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 Recommendations section).

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 the Recommendations section of the Report under 'Recommendations ' and on a label at or near to the consumer unit/distribution board.

Glossary of Terms

Abbreviations

ATLP	Access to Live Parts	LSHF/PVCS	Low Smoke Halogen Free PVC Single Cables in Conduit/ Trunking Containment
BH	Bulkhead Light Fitting	LSHF/SWA	Low Smoke Halogen Free Steel Wired Armoured Cable
CMET	Consumer Main Earth Terminal	LSHF/T&E	Low Smoke Halogen Free T&E
CPC	Circuit Protective Conductor	LSHF/XLPE/SWA	XLPE Low Smoke Halogen Free Steel Wired Armoured Cable
CSP	Heat Resistant Rubber Flexible Cable	MCB	Miniature Circuit Breaker
DB	Distribution Board	MCCB	Moulded Case Circuit Breaker
DNO	Distribution Network Operator	MEB	Main Equipotential Bonding
EES	Emergency Exit Signs	MET	Main Earth Terminal
EPR	Heat Resistant Rubber Flexible Cable	MICC	Mineral Insulated Copper Cable
ELV	Extra Low Voltage	NT	Not Tested (Dysfunctional)
EML	Emergency Lighting	OCP	Overcurrent Protection
EN 60898	Miniature Circuit Breaker	PSU	Power Supply Unit (via 13A FCU)
EN 60947-2	Moulded Case Circuit Breaker	PVC T&E	PVC/PVC twin and earth cable
EN 60947-3	Switch, disconnector, or switch-fuse	PVC/SWA	PVC Steel Wired Armoured Cable
EN 61008	Residual Circuit Breaker (without overcurrent protection)	PVCS	PVC Single Cables in Conduit/ Trunking Containment
EN 61009	Residual Circuit Breaker (with overcurrent protection)	Radial	Radial Circuit
FCU	13A Fused Connection Unit	RC	Refer to Comments
FIR	Further Investigation Required	RCD	Residual Circuit Device
FP	Fire Rated Protected Cable	RFC	Ring Final Circuit
IP	Ingress Protection	S/O 13A	Socket Outlet
LHS/RHS	Left Hand Side/Right Hand Side	VIR	Vulcanised Indian Rubber
LSF	Low Smoke & Fume Cables	XLPE/SWA	XLPE Steel Wired Armoured Cable

Overcurrent Protective Device Abbreviations

BS (EN)	Type No	Device
60898	B	BS EN 60898 MCB Type B - Miniature Circuit Breaker (Type B)
60898	C	BS EN 60898 MCB Type C - Miniature Circuit Breaker (Type C)
60898	D	BS EN 60898 MCB Type D - Miniature Circuit Breaker (Type D)
61009	B	BS EN 61009 RCBO Type B - Residual Current Device (Type B)
61009	C	BS EN 61009 RCBO Type C - Residual Current Device (Type C)
61009	D	BS EN 61009 RCBO Type D - Residual Current Device (Type D)
3871	1	BS 3871 MCB Type 1 - Miniature Circuit Breaker (Type 1)
3871	2	BS 3871 MCB Type 2 - Miniature Circuit Breaker (Type 2)
3871	3	BS 3871 MCB Type 3 - Miniature Circuit Breaker (Type 3)
3871	4	BS 3871 MCB Type 4 - Miniature Circuit Breaker (Type 4)
61008		BS EN 61008 RCD - Residual Current Device
4293		BS EN 4293 RCD - Residual Current Device
88-2	E	BS 88-2 Fuse System E (Bolted) - High Rupture Capacity Cartridge Fuse
88-2	G	BS 88-2 Fuse System G (Clip-In) - High Rupture Capacity Cartridge Fuse
88-2.2	gG	BS 88-2.2 Fuse (gG) - High Rupture Capacity Cartridge Fuse
88-3	C	BS 88-3 Fuse System C - High Rupture Capacity Cartridge Fuse
88-6	gG	BS 88-6 Fuse (gG) - High Rupture Capacity Cartridge Fuse
1361	2	BS 1361 Fuse Type 2
1362		BS 1362 Fuse (Domestic)
3036		BS 3036 Fuse Rewirable (Semi-Enclosed)
60947-2	MCCB	BS EN 60947-2 MCCB - Moulded Case Circuit Breaker
60947-3		BS EN 60947-3 - Isolator
60947-2	ACB	BS EN 60947-2 ACB - Air Circuit Breaker
N/V		Non-Verifiable
LIM		Limitation (Refer to: Limitations of the Inspection)

British Standard (BS)

British Standard BS 7671: 2018 Amendment 1: 2020 – also known as the IET (Institution of Engineering & Technology) Wiring Regulations (18th Edition) - Requirements for Electrical Installations is the standard against which all electrical installations are assessed.

Certificate

Any electrician installing a new electrical installation (including a single circuit), altering, extending or adapting an existing circuit should issue to their client, or the homeowner, an Electrical Installation Certificate (EIC), or a Minor Electrical Installation Works Certificate (MEW) to confirm the work complies with the requirements of BS 7671 Appendix 6

Circuit

An assembly of electrical equipment (socket outlets, lighting points and switches) supplied from the same origin and protected against overcurrent by the same protective device(s).

Class I Equipment

Equipment in which protection against electric shock does not rely on basic insulation only, but which includes means for the connection of exposed-conductive-parts to a protective conductor in the fixed wiring of the installation. Class I equipment has exposed metallic parts, e.g. the metallic enclosure of washing machine.

Class II Equipment

Class II equipment, such as music systems, television and video players, in which protection against electric shock does not rely on basic insulation only, but in which additional safety precautions such as supplementary insulation are provided, there being no provision for the connection of exposed metalwork of the equipment to a protective conductor, and no reliance upon precautions to be taken in the fixed wiring of the installation.

Class III Equipment

Equipment, for example for medical use, in which protection against electric shock relies on supply at SELV (Safety extra low voltage) and in which voltages higher than those of SELV are not generated. Class III equipment must be supplied from a safety isolating transformer.

Consumer Unit (also known as a fuse board, or distribution board)

A type of distribution board (principally for domestic premises) comprising a co-ordinated assembly for the control and distribution of electrical energy, incorporating manual means of double-pole isolation on the incoming circuit(s) and an assembly of one or more fuses, circuit-breakers, residual current operated devices or signalling and other devices purposely manufactured for such use.

Distribution Board

An assembly containing switching or protective devices (e.g. fuses, circuit-breakers, residual current operated devices) associated with one or more outgoing circuits fed from one or more incoming circuits, together with terminals for the neutral and protective circuit conductors. It may also include signalling and other control devices. Means of isolation may be included in the board or may be provided separately.

Electrical Installation

Any assembly of electrical equipment supplied by a common source to fulfil a specific purpose.

EICR – Electrical Installation Condition Report

An electrical survey, known as an Electrical Installation Condition Report (EICR) will reveal if electrical circuits are overloaded, find potential hazards in the installation, identify defective DIY work, highlight any lack of earthing or bonding and carry out tests on the fixed wiring of the installation. The report will establish the overall condition of all the electrics and state whether it is satisfactory for continued use and should detail any work that might need to be done.

Electrical Safety Regulations

Registered electricians have already helped to improve the standard of electrical work in the UK. A new electrical safety law, often referred to as Part P (of the Building Regulations), has further enhanced the protection of homeowners and reduced the risk of electric shock when using electricity. The law, which applies to England and Wales aims to improve electrical safety in the home and prevent the number of accidents, which are caused by faulty electrical work. The law requires an electrician registered with a government-approved scheme, such as the NICEIC/ECA/NAPIT/ELECSA/STROMA etc., to carry out most electrical work in the home. After completion of any work, your registered electrician will issue you with a Building Regulations Compliance Certificate to prove it meets the required standards of Part P. You can only carry out electrical work yourself if you can inspect and test that it is safe for use. To comply with the law, you must notify your local building control office before you begin any work and pay the appropriate fee for them to inspect the work.

Extension Leads
An extension cable, also known as a power extender, extension cord or an extension lead, is a length of flexible electrical power cable or flex with a plug on one end and one or more sockets on the other end - usually of the same type as the plug. However, use of extension leads should be avoided where possible, as there is a chance of overloading the circuit.

Miniature Circuit Breaker
A device capable of making, carrying and breaking normal load currents, and making and automatically breaking under predetermined conditions, abnormal currents such as short-circuit currents. It is usually required to operate infrequently, although some types are suitable for frequent operation.

Moulded Case Circuit Breaker
A device capable of making, carrying, and breaking normal load currents, and making and automatically breaking under pre-determined conditions abnormal currents such as short-circuit currents. It is usually required to operate infrequently, although some types are suitable for frequent operation. It is meant for higher rated current and is commonly used in Industrial applications. It's usual range is 250A-800A.

Overcurrent
Electrical current (in amps) that exceeds the maximum limit of a circuit. May result in risk of fire or shock from insulation damaged from heat generated by overcurrent condition.

Part P
The specific section of the Building Regulations for England and Wales that relates to electrical installations in domestic properties. Part P provides safety regulations to protect householders and requires most domestic electrical work to be carried out by government-registered electricians, or to be inspected by Building Control officers.

PAT - Portable Appliance Testing
Inspection and testing of electrical equipment including portable appliances, moveable equipment, hand held appliances, stationary equipment, fixed equipment/appliances, IT equipment and extension leads.

PLI - Public Liability Insurance
Broad term for insurance which covers liability exposures for individuals and business owners. Homeowners should check that their electrician has public liability insurance, which covers them if someone is accidentally injured by them or their business operation. It will also cover them if they damage your property while on business. The cover should include any legal fees and expenses which result from any claim by you. Homeowners looking to employ trades people to undertake work on their homes should ensure the companies selected have suitable cover – minimum recommendation is £2 million.

Portable equipment
Electrical equipment which is less than 18 kg in mass and is intended to be moved while in operation or which can easily be moved from one place to another, such as a toaster, food mixer, vacuum cleaner, fan heater.

Prospective fault current
The value of overcurrent at a given point in a circuit resulting from a fault between live conductors, or a live conductor and earth.

RCD - Residual Current Device
Residual current device is a safety device that switches off the electricity automatically when it detects an earth fault, providing protection against electric shock (only when rated at 30mA or less).

Ring Final Circuit
A final circuit connected in the form of a ring and connected to a single point of supply.

Voltages:

SELV
Separated Extra-Low Voltage. An extra-low voltage system, which is electrically separated from Earth and from other systems in such a way that a single fault cannot give rise to the risk of electric shock.

Extra-Low Voltage
Normally not exceeding 50 V ac or 120 V ripple-free dc whether between conductors or to earth.

Low Voltage
Low Voltage (50V - 1000V)

mA
Milliamp or 1/1000 part of an amp (0.001 amp)