APPENDIX 4

Samuel Wickens Centre

Broadmark Lane Car Park

BN16 2NB

ELECTRICAL INSTALLATION CONDITION REPORT

Requirements For Electrical Installations - BS 7671 IET Wiring Regulations

Report Reference:

1 DETAILS OF THE PERSON ORDERING THE REPORT

Client: Rustington Parish Council

Address: 34 Woodland Avenue, Rustington, West Sussex, BN16 3HB

2 REASON FOR PRODUCING THIS REPORT

Reason for producing this report:

Periodic inspection.

Date(s) on which inspection and testing was carried out: 20/05/2020

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

Installation Address: The Samuel Wickens Centre, Broadmark Lane Car Park, Rustington, West Sussex

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

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) No 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):

20% removal of accessories for testing. Insulation testing done between LN&E at 250v to avoid damaged to sensitive equipment.

Agreed with: Client.

Operational limitations including the reasons:

Protect sensitive equipment like dimmer switches, electronic starters, indicator lamps and LED technology.

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 2018.
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: 3 Years

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	DB1/6L1- Downlights under canopy not suitable IP rated for external use. IP rated downlights should be installed.	C2
2	Surge Protection device required to limit transient over voltages and divert surge current, protecting electronic equipment	C2

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:	1, 2
Improvement recommended for items:	N/A
Further investigation required for items:	N/A

8 GENERAL CONDITION OF THE INSTALLATION

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

All wiring and containment systems installed to a good standard. New 18th edition regulation of surge protection means that this report is unsatisfactory however not a true reflection on buildings condition.

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 sect[illegible]

Tradir

Addre

Registration Number if applicable):

Telephone Number:

For the INSPECTION, TESTING AND ASSESSMENT of the report:

Name: Position: Electrician Signature: Date: 20/05/2020

10 SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS

Earthing Arrangements		Number and Type of Live Conductors						Nature of Supply Parameters		Supply Protective Device	
			ac: ✓			dc:	N/A	Nominal voltage(s):	U: 400 V Uo: 230 V	BS(EN):	1361 Fuse HBC
TN-S	N/A	1-phase (2 wire):	N/A	1-phase (3 wire):	✓	2 pole:	N/A				
TN-C-S	✓	2-phase (3 wire):	N/A			3 pole:	N/A	Nominal frequency, f:	50 Hz	Type:	2
TNC	N/A	3-phase (3 wire):	N/A	3-phase (4 wire):	N/A	Other:	N/A	Prospective fault current, Ipf:	1.64 kA	Rated current:	100 A
TT	N/A	Other:		N/A				External earth fault loop impedance, Ze:	0.27 Ω	Short-circuit capacity:	33 kA
IT	N/A	Confirmation of supply polarity:			✓			Number of supplies:	1		

11 PARTICULARS OF INSTALLATION REFERRED TO IN THE CERTIFICATE

Means of Earthing

Distributor's facility: ✓

Installation earth electrode: N/A

Details of Installation Earth Electrode (where applicable)

Type: N/A Location: N/A

Resistance to Earth: N/A Ω Method of measurement: N/A

Maximum Demand (Load): 80 Amps Protective measure(s) against electric shock: ADS

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

Type BS(EN): 60439-3

Number of poles: 3

Current rating: 125 A

Fuse/device rating or setting: N/A A

Voltage rating: 400 V

Supply conductors material: Copper

Supply conductors csa: 25 mm^2

If RCD main switch:

Rated residual operating current (IΔn): N/A mA

Rated time delay: N/A ms

Measured operating time (at IΔn): N/A ms

Earthing and Protective Bonding Conductors

Earthing conductor

Conductor material: Copper csa: 25 mm^2 Connection/ continuity verified: ✓

Main protective bonding conductors

Conductor material: Copper csa: 25 mm^2 Connection/ continuity verified: ✓

Bonding of extraneous-conductive parts

To water installation pipes: ✓

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	Comment	Outcome
1.0	**EXTERNAL CONDITION OF INTAKE EQUIPMENT (VISUAL INSPECTION ONLY)**		
1.1	Service cable	N/A	✓
1.2	Service head	N/A	✓
1.3	Earthing arrangements	N/A	✓
1.4	Meter tails	N/A	✓
1.5	Metering equipment	N/A	✓
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	N/A
2.2	Adequate arrangements where a generating set operates in parallel with the public supply (551.7)	N/A	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)	N/A	N/A
3.1.2	Adequacy of earthing conductor size (542.3; 543.1.1)	N/A	✓
3.1.3	Adequacy of earthing conductor connections (542.3.2)	N/A	✓
3.1.4	Accessibility of earthing conductor connections (543.3.2)	N/A	✓
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)	N/A	✓
3.2	FELV - requirements satisfied (411.7; 411.7.1)	N/A	✓
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	N/A
4.2	Earth-free local equipotential bonding (418.2)	N/A	N/A
4.3	Electrical separation (Section 413; 418.3)	N/A	N/A
4.4	Double insulation (Section 412)	N/A	N/A
4.5	Reinforced insulation (Section 412)	N/A	N/A
5.0	**DISTRIBUTION EQUIPMENT**		
5.1	Adequacy of working space/accessibility to equipment (132.12; 513.1)	N/A	✓
5.2	Security of fixing (134.1.1)	N/A	✓
5.3	Condition of insulation of live parts (416.1)	N/A	✓
5.4	Adequacy/security of barriers (416.2)	N/A	✓
5.5	Condition of enclosure(s) in terms of IP rating etc (416.2)	N/A	✓
5.6	Condition of enclosure(s) in terms of fire rating etc (421.1.6; 421.1.201; 526.5)	N/A	✓
5.7	Enclosure not damaged/deteriorated so as to impair safety (651.2)	N/A	✓
5.8	Presence and effectiveness of obstacles (417.2)	N/A	✓
5.9	Presence of main switch(es), linked where required (462.1; 462.1.201; 462.2)	N/A	✓

OUTCOMES

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

13 INSPECTION SCHEDULE (CONTINUED)

Item	Description	Comment	Outcome
5.10	Operation of main switch(es) (functional check) (643.10)	N/A	✓
5.11	Manual operation of circuit-breakers and RCDs to prove disconnection (643.10)	N/A	✓
5.12	Confirmation that integral test button/switch causes RCD(s) to trip when operated (functional check) (643.10)	N/A	✓
5.13	RCD(s) provided for fault protection – includes RCBOs (411.4.204; 411.5.2; 531.2)	N/A	✓
5.14	RCD(s) provided for additional protection/requirements, where required – includes RCBOs (411.3.3; 415.1)	N/A	✓
5.15	Presence of RCD six-monthly test notice at or near equipment, where required (514.12.2)	N/A	✓
5.16	Presence of diagrams, charts or schedules at or near equipment, where required (514.9.1)	N/A	✓
5.17	Presence of non-standard (mixed) cable colour warning notice at or near equipment, where required (514.14)	N/A	✓
5.18	Presence of alternative supply warning notice at or near equipment, where required (514.15)	N/A	✓
5.19	Presence of next inspection recommendation label (514.12.1)	N/A	✓
5.20	Presence of other required labelling (please specify) (Section 514)	N/A	✓
5.21	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)	N/A	✓
5.22	Single-pole switching or protective devices in line conductors only (132.14.1; 530.3.3)	N/A	✓
5.23	Protection against mechanical damage where cables enter equipment (522.8.1; 522.8.5; 522.8.11)	N/A	✓
5.24	Protection against electromagnetic effects where cables enter ferromagnetic enclosures (521.5.1)	N/A	✓
6.0	**DISTRIBUTION CIRCUITS**		
6.1	Identification of conductors (514.3.1)	N/A	✓
6.2	Cables correctly supported throughout their run (521.10.202; 522.8.5)	N/A	✓
6.3	Condition of insulation of live parts (416.1)	N/A	✓
6.4	Non-sheathed cables protected by enclosure in conduit, ducting or trunking (521.10.1)	N/A	✓
6.5	Suitability of containment systems for continued use (including flexible conduit) (Section 522)	N/A	✓
6.6	Cables correctly terminated in enclosures (Section 526)	N/A	✓
6.7	Confirmation that ALL conductor connections, including connections to busbars, are correctly located in terminals and are tight and secure	N/A	✓
6.8	Examination of cables for signs of unacceptable thermal or mechanical damage/deterioration (421.1; 522.6)	N/A	✓
6.9	Adequacy of cables for current-carrying capacity with regard for the type and nature of installation (Section 523)	N/A	✓
6.10	Adequacy of protective devices: type and rated current for fault protection (411.3)	N/A	✓
6.11	Presence and adequacy of circuit protective conductors (411.3.1.1; 543.1)	N/A	✓
6.12	Coordination between conductors and overload protective devices (433.1; 533.2.1)	N/A	✓

OUTCOMES

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

14 INSPECTION SCHEDULE (CONTINUED)

Item	Description	Comment	Outcome
6.13	Cable installation methods/practices with regard to the type and nature of installation and external influences (Section 522)	N/A	✓
6.14	Where exposed to direct sunlight, cable of a suitable type (522.11.1)	N/A	✓
6.15	**Cables concealed under floors, above ceilings, in walls/partitions less than 50mm 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	N/A	✓
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)	N/A	✓
6.16	Provision of fire barriers, sealing arrangements and protection against thermal effects (Section 527)	N/A	✓
6.17	Band II cables segregated/separated from Band I cables (528.1)	N/A	✓
6.18	Cables segregated/separated from non-electrical services (528.3)	N/A	✓
6.19	Condition of circuit accessories (651.2)	N/A	✓
6.20	Suitability of circuit accessories for external influences (512.2)	N/A	✓
6.21	Single-pole switching or protective devices in line conductors only (132.14.1; 530.3.3)	N/A	✓
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)	N/A	✓
6.23	Presence, operation and correct location of appropriate devices for isolation and switching (Chapter 46; Section 537)	N/A	✓
6.24	General condition of wiring systems (651.2)	N/A	✓
6.25	Temperature rating of cable insulation (522.1.1; Table 52.1)	N/A	✓
7.0	**FINAL CIRCUITS**		
7.1	Identification of conductors (514.3.1)	N/A	✓
7.2	Cables correctly supported throughout their run (521.10.202; 522.8.5)	N/A	✓
7.3	Condition of insulation of live parts (416.1)	N/A	✓
7.4	Non-sheathed cables protected by enclosure in conduit, ducting or trunking (521.10.1)	N/A	✓
7.5	Suitability of containment systems for continued use (including flexible conduit) (Section 522)	N/A	✓
7.6	Adequacy of cables for current-carrying capacity with regard for the type and nature of installation (Section 523)	N/A	✓
7.7	Adequacy of protective devices: type and rated current for fault protection (411.3)	N/A	✓
7.8	Presence and adequacy of circuit protective conductors (411.3.1.1; 543.1)	N/A	✓
7.9	Co-ordination between conductors and overload protective devices (433.1; 533.2.1)	N/A	✓
7.10	Wiring system(s) appropriate for the type and nature of the installation and external influences (Section 522)	N/A	✓
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)	N/A	✓
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)	N/A	✓

OUTCOMES

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

15 INSPECTION SCHEDULE (CONTINUED)

Item	Description	Comment	Outcome
7.12	**Provision of additional protection by 30mA RCD:**		
7.12.1	For all socket-outlets of rating 32A or less unless exempt (411.3.3) *	N/A	✓
7.12.2	For the supply of mobile equipment not exceeding 32A rating for use outdoors (411.3.3) *	N/A	✓
7.12.3	For cables concealed in walls at a depth of less than 50mm (522.6.202, 522.6.203) *	N/A	✓
7.12.4	For cables concealed in walls/partitions containing metal parts regardless of depth (522.6.203) *	N/A	✓
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)	N/A	✓
7.14	Band II cables segregated/separated from Band I cables (528.1)	N/A	✓
7.15	Cables segregated/separated from non-electrical services (528.3)	N/A	✓
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)	N/A	✓
7.16.2	No basic insulation of a conductor visible outside enclosure (526.8)	N/A	✓
7.16.3	Connections of live conductors adequately enclosed (526.5)	N/A	✓
7.16.4	Adequately connected at point of entry to enclosure (glands, bushes etc.) (522.8.5)	N/A	✓
7.17	Condition of accessories including socket-outlets, switches and joint boxes (651.2)	N/A	✓
7.18	Suitability of accessories for external influences (512.2)	N/A	✓
7.19	Single-pole switching or protective devices in line conductors only (132.14.1, 530.3.3)	N/A	✓
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)	N/A	✓
8.1.2	Acceptable location – state if local or remote from equipment in question (Section 462; 537.2.7)	N/A	✓
8.1.3	Capable of being secured in the OFF position (462.3)	N/A	✓
8.1.4	Correct operation verified (643.10)	N/A	✓
8.1.5	Clearly identified by position and/or durable marking (537.2.6)	N/A	✓
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)	N/A	✓
8.2.2	Acceptable location – state if local or remote from equipment in question (537.3.2.4)	N/A	✓
8.2.3	Capable of being secured in the OFF position (462.3)	N/A	✓
8.2.4	Correct operation verified (643.10)	N/A	✓
8.2.5	Clearly identified by position and/or durable marking (537.3.2.4)	N/A	✓

OUTCOMES

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

16 INSPECTION SCHEDULE (CONTINUED)

Item	Description	Comment	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)	N/A	✓
8.4.2	Correct operation verified (537.3.1.1; 537.3.1.2)	N/A	✓
9.0	**CURRENT-USING EQUIPMENT (PERMANENTLY CONNECTED)**		
9.1	Condition of equipment in terms of IP rating etc (416.2)	N/A	✓
9.2	Equipment does not constitute a fire hazard (Section 421)	N/A	✓
9.3	Enclosure not damaged/deteriorated so as to impair safety (134.1.1; 416.2; 512.2)	N/A	✓
9.4	Suitability for the environment and external influences (512.2)	N/A	✓
9.5	Security of fixing (134.1.1)	N/A	✓
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)	N/A	✓
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	N/A
10.2	Where used as a protective measure, requirements for SELV or PELV met (701.414.4.5)	N/A	N/A
10.3	Shaver sockets comply with BS EN 61558-2-5 formerly BS 3535 (701.512.3)	N/A	N/A
10.4	Presence of supplementary bonding conductors, unless not required by BS 7671:2018 (701.415.2)	N/A	N/A
10.5	Low voltage (e.g. 230 volt) socket-outlets sited at least 3m from zone 1 (701.512.3)	N/A	N/A
10.6	Suitability of equipment for external influences for installed location in terms of IP rating (701.512.2)	N/A	C2
10.7	Suitability of accessories and controlgear etc. for a particular zone (701.512.3)	N/A	N/A
10.8	Suitability of current-using equipment for particular position within the location (701.55)	N/A	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	N/A
11.2	N/A	N/A	N/A
11.3	N/A	N/A	N/A

OUTCOMES

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

17 SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

Distribution board designation: **D.B. 1 (Eaton)** Location: Plant Room

Circuit number and phase	Circuit designation	Type of wiring	Reference Method	Number of points served	Circuit conductors: csa Live mm²	Circuit conductors: csa cpc mm²	Max disconnect time permitted by BS7671 s	Overcurrent protective devices BS(EN)	Type No	Rating A	Capacity kA	RCD Operating current, IΔn mA	Maximum Zs permitted by BS7671 Ω	Circuit Impedances (Ohms) Ring final circuits only (measured end to end) r1 (Line)	rn (Neutral)	r2 (cpc)	All circuits (one column to be completed) R1+R2	R2	Insulation resistance Live - Live MΩ	Live - Earth MΩ	Test voltage V	Polarity ✓	Maximum measured earth fault loop impedance Zs Ω	RCD Disconnection time ms	RCD Test button operation ✓	AFDD Test button operation ✓
1L1	Oven & Hob	A	C	2	10	6	0.4	61009	B	32	10	30	1.37	N/A	N/A	N/A	0.21	N/A	> 200	> 200	500	✓	0.48	22	✓	N/A
1L2	Sockets (Kitchen)	A	C	5	4	1.5	0.4	61009	B	32	10	30	1.37	0.41	0.41	0.68	0.27	N/A	> 200	> 200	500	✓	0.54	19	✓	N/A
1L3	Dishwasher	A	C	1	6	2.5	0.4	61009	B	16	10	30	2.73	N/A	N/A	N/A	0.84	N/A	> 200	> 200	500	✓	1.11	18	✓	N/A
2L1	Water Boiler (Kitchen)	A	C	1	4	1.5	0.4	61009	B	20	10	30	2.19	N/A	N/A	N/A	0.71	N/A	> 200	> 200	500	✓	0.98	21	✓	N/A
2L2	Socket (Outside South)	A	C	1	2.5	1.5	0.4	61009	B	16	10	30	2.73	N/A	N/A	N/A	0.46	N/A	> 200	> 200	500	✓	0.73	22	✓	N/A
2L3	Water Boiler (Staff Room)	A	C	1	4	1.5	0.4	61009	B	16	10	30	2.73	N/A	N/A	N/A	0.45	N/A	> 200	> 200	500	✓	0.72	26	✓	N/A
3L1	Lights (Kitchen, Outside South, Staff Room)	A	C	9	1.5	1.5	0.4	61009	B	6	10	30	7.28	N/A	N/A	N/A	0.67	N/A	> 200	> 200	500	✓	0.94	22	✓	N/A
3L2	Pond Supply	A	C	1	2.5	1.5	0.4	61009	B	16	10	30	2.73	N/A	N/A	N/A	0.56	N/A	> 200	> 200	500	✓	0.83	14	✓	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

18 BOARD CHARACTERISTICS

APPLIES WHEN THE BOARD IS NOT CONNECTED TO THE ORIGIN OF THE INSTALLATION

Supply to this distribution board is from:		Origin	No of phases:	N/A				Confirmation of supply polarity:			N/A
Overcurrent protective device for the distribution circuit:	BS(EN):	N/A	Rating:	N/A A	Nominal Voltage:	N/A V	Zs:	N/A Ω	Ipf:	N/A kA	
RCD	BS(EN):	N/A	No of poles:	N/A	Rating:	N/A mA	Disconnection time at In:	N/A ms	Disconnection time at 5In:	N/A ms	

19 DETAILS OF TEST INSTRUMENTS

Details of Test Instruments used (state serial and/or asset numbers):

Multi-functional:	4082521	Insulation resistance:	4082521	Continuity:	4082521
Earth electrode resistance:	4082521	Earth fault loop impedance:	4082521	RCD:	4082521

20 TESTED BY

Name:	Position:	Electrician	Signature:	Date:	20/05/2020

This form is based on the model shown in Appendix 6 of BS 7671:2018.

SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

Distribution board designation: **D.B. 1 (Eaton)** Location: Plant Room

Circuit number and phase	Circuit designation	Type of wiring	Reference Method	Number of points served	Circuit conductors: csa		Max disconnect time permitted by BS7671	Overcurrent protective devices				RCD	Maximum Z_s permitted by BS7671	Circuit impedances (Ohms)					Insulation resistance			Polarity	Maximum measured earth fault loop impedance Z_s	RCD		AFDD
					Live	cpc		BS(EN)	Type No	Rating	Capacity	Operating current, $I_{\Delta n}$		Ring final circuits only (measured end to end)			All circuits (one column to be completed)		Live - Live	Live - Earth	Test voltage			Disconnection time	Test button operation	Test button operation
														r_1	r_n	r_2	R_1+R_2	R_2								
					mm^2	mm^2	s			A	kA	mA	Ω	(Line)	(Neutral)	(cpc)			MΩ	MΩ	V	✓	Ω	ms	✓	✓
3L3	Sockets (Staff Room, Reception East Wall, Front Door, Security Alarm)	A	C	5	2.5	1.5	0.4	61009	B	32	10	30	1.37	0.30	0.30	0.51	0.21	N/A	> 200	> 200	500	✓	0.48	14	✓	N/A
4L1	Sockets (Corridor, Disabled Alarm, Heater)	A	C	3	2.5	1.5	0.4	61009	B	16	10	30	2.73	N/A	N/A	N/A	0.45	N/A	> 200	> 200	500	✓	0.72	19	✓	N/A
4L2	Sockets (Reception Trunking)	A	C	4	4	1.5	0.4	61009	B	32	10	30	1.37	0.31	0.28	0.46	0.19	N/A	> 200	> 200	500	✓	0.45	17	✓	N/A
4L3	Socket (Outside North)	A	C	1	2.5	1.5	0.4	61009	B	16	10	30	2.73	N/A	N/A	N/A	0.82	N/A	> 200	> 200	500	✓	1.09	21	✓	N/A
5L1	Sockets (Main Hall)	A	C	7	4	1.5	0.4	61009	B	32	10	30	1.37	0.42	0.42	0.70	0.28	N/A	> 200	> 200	500	✓	0.55	31	✓	N/A
5L2	Lights (Main Hall East)	A	C	10	1.5	1.5	0.4	61009	B	6	10	30	7.28	N/A	N/A	N/A	0.51	N/A	> 200	> 200	500	✓	0.78	22	✓	N/A
5L3	Lights (Reception, Plant Room)	A	C	19	1.5	1.5	0.4	61009	B	6	10	30	7.28	N/A	N/A	N/A	0.29	N/A	> 200	> 200	500	✓	0.56	13	✓	N/A
6L1	Socket (Museum)	A	C	1	2.5	1.5	0.4	61009	B	16	10	30	2.73	N/A	N/A	N/A	0.21	N/A	> 200	> 200	500	✓	0.48	11	✓	N/A
6L2	Lights (Main Hall West)	A	C	10	1.5	1.5	0.4	61009	B	6	10	30	7.28	N/A	N/A	N/A	0.61	N/A	> 200	> 200	500	✓	0.87	18	✓	N/A
6L3	Lights (Outside Canopy, Sign)	A	C	10	1.5	1.5	0.4	61009	B	6	10	30	7.28	N/A	N/A	N/A	1.06	N/A	> 200	> 200	500	✓	1.23	20	✓	N/A
7L1	Air Con (East)	A	C	1	6	6	0.4	61009	B	32	10	30	1.37	N/A	N/A	N/A	0.22	N/A	> 200	> 200	500	✓	0.57	15	✓	N/A
7L2	Air Con (West)	A	C	1	6	6	0.4	61009	B	32	10	30	1.37	N/A	N/A	N/A	0.24	N/A	> 200	> 200	500	✓	0.59	13	✓	N/A
7L3	Air Con (Reception)	A	C	1	4	4	0.4	61009	B	16	10	30	2.73	N/A	N/A	N/A	0.31	N/A	> 200	> 200	500	✓	0.58	13	✓	N/A
8L1	Air Con (Fans)	A	C	1	2.5	1.5	0.4	61009	B	16	10	30	2.73	N/A	N/A	N/A	0.22	N/A	> 200	> 200	500	✓	0.47	22	✓	N/A
8L2	Sockets (Museum East)	A	C	6	4	1.5	0.4	61009	B	32	10	30	1.37	0.38	0.36	0.63	0.24	N/A	> 200	> 200	500	✓	0.49	18	✓	N/A
8L3	Sockets (Museum, Store area)	A	C	5	4	1.5	0.4	61009	B	32	10	30	1.37	0.47	0.47	0.78	0.31	N/A	> 200	> 200	500	✓	0.56	17	✓	N/A
9L1	Heater (Office)	A	C	1	2.5	1.5	0.4	61009	B	16	10	30	2.73	N/A	N/A	N/A	0.34	N/A	> 200	> 200	500	✓	0.61	19	✓	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

This form is based on the model shown in Appendix 6 of BS 7671:2018.

SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

Distribution board designation: **D.B. 1 (Eaton)** Location: Plant Room

Circuit number and phase	Circuit designation	Type of wiring	Reference Method	Number of points served	Circuit conductors: csa Live mm²	Circuit conductors: csa cpc mm²	Max disconnect time permitted by BS7671 s	Overcurrent protective devices BS(EN)	Type No	Rating A	Capacity kA	RCD Operating current, IΔn mA	Maximum Z_s permitted by BS7671 Ω	Circuit Impedances (Ohms) Ring final circuits only (measured end to end) r_1 (Line)	r_n (Neutral)	r_2 (cpc)	All circuits (one column to be completed) R_1+R_2	R_2	Insulation resistance Live - Live MΩ	Live - Earth MΩ	Test voltage V	Polarity ✓	Maximum measured earth fault loop impedance Zs Ω	RCD Disconnection time ms	RCD Test button operation ✓	AFDD Test button operation ✓
9L2	Sockets (Museum West)	A	C	6	4	1.5	0.4	61009	B	32	10	30	1.37	0.31	0.29	0.48	0.20	N/A	> 200	> 200	500	✓	0.47	19	✓	N/A
9L3	Server	A	C	1	4	1.5	0.4	61009	B	6	10	30	7.28	N/A	N/A	N/A	0.09	N/A	> 200	> 200	500	✓	0.36	18	✓	N/A
10L1	Heater (Office)	A	C	1	2.5	1.5	0.4	61009	B	16	10	30	2.73	N/A	N/A	N/A	0.34	N/A	> 200	> 200	500	✓	0.61	21	✓	N/A
10L2	Lights (Museum Track)	A	C	42	1.5	1.5	0.4	61009	B	10	10	30	4.37	N/A	N/A	N/A	0.67	N/A	> 200	> 200	500	✓	0.99	13	✓	N/A
10L3	Sockets (Museum High Level)	A	C	1	2.5	1.5	0.4	61009	B	16	10	30	2.73	N/A	N/A	N/A	0.16	N/A	> 200	> 200	500	✓	0.43	19	✓	N/A
11L1	Water Heater (Toilets)	A	C	1	2.5	1.5	0.4	61009	B	16	10	30	2.73	N/A	N/A	N/A	0.42	N/A	> 200	> 200	500	✓	0.69	11	✓	N/A
11L2	Lights (Museum, Store area)	A	C	3	1.5	1.5	0.4	61009	B	6	10	30	7.28	N/A	N/A	N/A	0.32	N/A	> 200	> 200	500	✓	0.59	15	✓	N/A
12L1	Hand Dryers (Ladies, Mens)	A	C	2	4	1.5	0.4	61009	B	20	10	30	2.19	N/A	N/A	N/A	0.32	N/A	> 200	> 200	500	✓	0.59	19	✓	N/A
12L2	Heater (Toilet Lobby)	A	C	1	2.5	1.5	0.4	61009	B	16	10	30	2.73	N/A	N/A	N/A	0.40	N/A	> 200	> 200	500	✓	0.67	18	✓	N/A
12L3	Lights (Toilets)	A	C	6	1.5	1.5	0.4	61009	B	6	10	30	7.28	N/A	N/A	N/A	0.65	N/A	> 200	> 200	500	✓	0.92	21	✓	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

This form is based on the model shown in Appendix 6 of BS 7671:2018.

SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

Distribution board designation: **D.B. 2 (Eaton)** Location: Plant Room

Circuit number and phase	Circuit designation	Type of wiring	Reference Method	Number of points served	Circuit conductors: csa Live mm²	Circuit conductors: csa cpc mm²	Max disconnect time permitted by BS7671 s	Overcurrent protective devices BS(EN)	Type No	Rating A	Capacity kA	RCD Operating current, IΔn mA	Maximum Zs permitted by BS7671 Ω	Circuit impedances (Ohms) Ring final circuits only (measured end to end) r1 (Line)	rn (Neutral)	r2 (cpc)	All circuits (one column to be completed) R1+R2	R2	Insulation resistance Live - Live MΩ	Live - Earth MΩ	Test voltage V	Polarity ✓	Maximum measured earth fault loop impedance Zs Ω	RCD Disconnection time ms	RCD Test button operation ✓	AFDD Test button operation ✓
1	Fire Alarm	A	C	1	2.5	1.5	0.4	60898	B	16	10	N/A	2.73	N/A	N/A	N/A	LIM	N/A	> 200	> 200	500	✓		N/A	N/A	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

BOARD CHARACTERISTICS

APPLIES WHEN THE BOARD IS NOT CONNECTED TO THE ORIGIN OF THE INSTALLATION

Supply to this distribution board is from:		Origin	No of phases:	1				Confirmation of supply polarity:			✓
Overcurrent protective device for the distribution circuit:	BS(EN):	N/A	Rating:	N/A A	Nominal Voltage:	230 V	Zs:	N/A Ω	Ipf:	N/A kA	
RCD	BS(EN):	N/A	No of poles:	N/A	Rating:	N/A mA	Disconnection time at In:	N/A ms	Disconnection time at 5In:	N/A ms	

DETAILS OF TEST INSTRUMENTS

Details of Test Instruments used (state serial and/or asset numbers):

Multi-functional:	4082521	Insulation resistance:	4082521	Continuity:	4082521
Earth electrode resistance:	4082521	Earth fault loop impedance:	4082521	RCD:	4082521

TESTED BY

Name: Position: Electrician Signature: Date: 20/05/2020

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.
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. 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 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 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 6).
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 6 of the Report under 'Recommendations' and on a label at or near to the consumer unit/ distribution board.