ELECTRICAL INSTALLATION CONDITION REPORT

NICEIC APPROVED CONTRACTOR

P & R HEATING LTD
Electrical & Mechanical Services

A. Details of the Client/Person Ordering the Report

Client: Gloucestershire County Council

Address: Shire Hall
Westgate Street
Gloucester
Gloucestershire
GL1 2TG

B. Reason for Producing this Report

Purpose of this report: Periodic inspection due

Date(s) on which Inspection: and testing was carried out: 08/09/2021

C. Details of the Installation which is the Subject of this Report

Installation: Stroud Library

Occupier: Stroud Library

Address: Stroud Library
Lansdown
Stroud
Gloucestershire GL5 1BB

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

Other: Library

Estimated age of wiring system: 40 yrs

Evidence of alterations or additions: ✓ If yes estimated Age 1 yrs

Record of Installation available: N/A Records held By: N/A

Date of previous inspection: 20/06/2016

D. Extent and Limitations Inspection and Testing

Extent of Electrical Installation covered by this report: Full Inspection & Test Of The Above Property

Agreed limitations including the reasons (See regulation 653.2): None

Agreed with name: N/A

Operational Limitations including the reasons (See page No N/A): None

This inspection and testing detailed in this report and accompanying schedules have been carried out in accordance with BS7671:2018 (IET Wiring Regulations) as amended to July 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.

E. Summary of the Condition of the Installation

General condition of the installations (In terms of electrical safety): UNSATISFACTORY

Overall assessment of the installation: Unsatisfactory

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

F. Recommendations

Where the overall assessment of the suitability of the installation for continued use above is stated as UNSATISFACTORY, I recommend that any observations classified as 'Danger present' (code C1) or 'Potentially dangerous' (code C2) are acted upon as a matter of urgency.
Investigation without delay is recommended for observations identified as *'further investigation required' (code FI)*.
Observation classified as 'Improvement recommended' (code C3) should be given due consideration.
Subject to the necessary remedial action being taken I recommend that the installation is further inspected and tested by 20/08/2026

G. Declaration

I , being the person(s) responsible for the inspection and testing of the electrical installation (as indicated by My 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 attached schedules, provides an accurate assessment of the condition of the electrical installation taking into account the stated extent and limitations in section D of this report.

Trading Title and address: P & R Heating LTD,
Unit 8 ,
Springfield Business Centre,
Stonehouse ,
Gloucester , GL10 3SX

NICEIC Enrolment Number: 020677

Branch No. (If Applicable): N/A

Inspected and tested by:

Name: Ashley Pittman Position: Electrician Signature: [signature] Date: 10/09/2021

Report authorised for issue by:

Name: Gavin Shelton Position: Electrical Contracts Mar Signature: GShelton Date: 10/09/2021

H. Schedule(s)

The attached schedule(s) are part of this document and this report is valid only when they are attached to it.

9 - 21 (odd) Schedule(s) of inspection and 10 - 22 (even) Schedule(s) of test results are attached

I. Supply Characteristics and Earthing Arrangements

Earthing Arrangements		Number and Type of Live Conductors						Nature of Supply Parameters			Supply protective device	
TN-S	N/A	a.c.	✓			d.c.	N/A	Nominal Voltage	U (1)	400 V	BS(EN)	Agreed Limitation
TN-C-S	✓	1-Phase (2 wire)	N/A	1-Phase (3 wire)	N/A	2 Wire	N/A	Nominal Voltage	U_0 (1)	230 V	Type	N/A
TN-C	N/A	2-Phase (3 wire)	N/A			3 Wire	N/A	Nominal frequency	f (1)	50 Hz	Nominal current rating	LIM A
TT	N/A	3-Phase (3 wire)	N/A	3-Phase (4 wire)	✓	Other	N/A	Prospective fault current	Ipf (2)	LIM kA	Short circuit capacity	LIM kA
IT	N/A	Other	N/A					External loop impedance	Ze (2)	LIM Ω		
		Confirmation of supply polarity	✓					Number of supplies		1		
								(Note: (1) by enquiry, (2) by enquiry or by measurement)				

J. Particulars of Installation Referred to in the Report

Means of earthing

Distributor's facility	✓
Installation earth electrode	N/A

Details of installation Earth Electrode (where applicable)

Type (e.g. rod(s), tape etc.)	N/A	Location	N/A
Resistance to Earth	N/A Ω	Method of measurement	N/A

Main Protective Conductors

Tick boxes and enter details as applicable

	Material	csa		Continuity Verified	Connection Verified
Earthing Conductor	Copper	25	mm^2	✓	✓
Main protective bonding conductors	Copper	16	mm^2	✓	✓

Bonding of Incoming Service

Water installation pipes	✓	Gas installation pipes	✓	Structural Steel	✓	Lightning protection	N/A
Oil installation pipes	N/A						

Other incoming service(s): N/A — Please State: N/A

Maximum Demand (Load): LIM Amps

Protective measure(s) against electric shock: ADS

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

Location	No Main Switch	Current rating	N/A A	if RCD main switch: Rated residual operation current, IΔn	N/A mA
Type BS(EN)	N/A	No of poles	N/A	Fuse/Device rating or setting	35 A
Supply Conductors material	Copper	Supply Conductors csa	35 mm^2	Voltage rating	N/A V
				Rated time delay	N/A ms
				RCD Operating time at, IΔn	N/A ms

K. Observations

Referring to the attached schedule(s) of Inspection and Test Results, and subject to the limitations specified at the Extent and Limitations of the Inspection and testing section.

No remedial action is required. N/A — The following observations are made ✓

Item No	Observations	Code
1	DB/MDP 2/L3 Fire Alarm Maximum measured Earth Fault Loop Impedence	C2
2	5 Distribution equipment 5.4 Adequacy/security of barriers	C2
3	5 Distribution equipment 5.5 Condition of enclosure(s) in terms of IP rating	C2
4	5 Distribution equipment 5.6 Condition of enclosure(s) in terms of fire rating	C2
5	5 Distribution equipment 5.7 Enclosure not damaged/deteriorated so as to impair safety	C2
6	--Observations continue on continuation sheet(s)--	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	0
C2 - Potentially dangerous - urgent remedial action required	20
C3 - Improvement recommended	5
FI - Further investigation required without delay	0

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

Item No	Description	Outcome	Comments
1.0	**External condition of electrical intake equipment (visual inspection only)**		
1.1	Service cable	✓	No
1.2	Service head	✓	No
1.3	Earthing arrangement	✓	No
1.4	Meter tails	✓	No
1.5	Metering equipment	✓	No
1.6	Isolator (where present)	✓	No
	Where inadequacies in intake equipment are encountered, it is recommended that the person ordering the report informs the appropriate authority.		
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	N/A	No
2.2	Adequate arrangements where generating set operates in parallel with the public supply	N/A	No
2.3	Presence of alternative / additional supply warning notices at the origin of the installation	N/A	No
3.0	**Automatic disconnection of supply**		
3.1	Main earthing and bonding arrangements:		
3.1.1	Presence and condition of distributor's earthing arrangement	✓	No
3.1.2	Presence and condition of earth electrode arrangement	N/A	No
3.1.3	Adequacy of earthing conductor size	✓	No
3.1.4	Adequacy of earthing conductor connections	✓	No
3.1.5	Accessibility of earthing conductor connections	✓	No
3.1.6	Adequacy of main protective bonding conductor size(s)	✓	No
3.1.7	Adequacy and location of main protective bonding conductor connections	✓	No
3.1.8	Accessibility of main protective bonding connections	✓	No
3.1.9	Accessibility/condition of other protective bonding connections	✓	No
3.1.10	Provision of earthing/bonding labels at all appropriate locations	✓	No
3.2	FELV:		
3.2.1	(FELV) system shall either be a transformer with at least simple separation between windings	N/A	No
3.2.2	Every plug, socket-outlet, luminaire supporting coupler (LSC), device for connecting a luminaire (DCL) and cable coupler in a FELV system not interchangeable with those of other systems within the premises	N/A	No
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	N/A	No
4.2	Earth-free local equipotential bonding	N/A	No
4.3	Electrical separation	N/A	No
4.4	Double insulation	N/A	No
4.5	Reinforced insulation	N/A	No
5.0	**Distribution equipment**		
5.1	Adequacy of working space/accessibility of equipment	✓	No
5.2	Security of fixing	✓	No
5.3	Condition of insulation of live parts	✓	No
5.4	Adequacy/security of barriers	C2 (see section K)	No
5.5	Condition of enclosure(s) in terms of IP rating	C2 (see section K)	No
5.6	Condition of enclosure(s) in terms of fire rating	C2 (see section K)	No
5.7	Enclosure not damaged/deteriorated so as to impair safety	C2 (see section K)	No
5.8	Presence and effectiveness of obstacles	✓	No
5.9	Presence of main switch(es), linked where required	C3 (see section K)	No
5.10	Operation of main switch(es) (functional check)	✓	No
5.11	Correct identification of circuit protective devices	✓	No
5.12	Adequacy of protective devices for prospective fault current	✓	No
5.13	RCD(s) provided for fault protection - includes RCBOs	✓	No
5.14	RCD(s) provided for additional protection - includes RCBOs	C2 (see section K)	No
5.15	RCD(s) provided for protection against fire - includes RCBOs	✓	No
5.16	Manual operation of circuit-breakers and RCDs to prove disconnection	✓	No
5.17	Confirmation that integral test button/switch causes RCD(S) to trip when operated (functional check)	✓	No

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

Item No	Description	Outcome	Comments
5.0	**Distribution equipment (continued)**		
5.18	Presence of RCD six-monthly retest notice at or near equipment, where required	✓	No
5.19	Presence of diagrams, charts or schedules at or near equipment, where required	C3 (see section K)	No
5.20	Presence of non-standard (mixed) cable colour warning notices at or near equipment, where required	✓	No
5.21	Presence of next inspection recommendation label	✓	No
5.22	All other required labelling provided	✓	No
5.23	Compatibility of protective device(s), base(s) and other components	✓	No
5.24	Single-pole switching or protective devices in line conductors only	✓	No
5.25	Protection against mechanical damage where cables enter equipment	✓	No
5.26	Protection against electromagnetic effects where cables enter ferromagnetic enclosures	✓	No
6.0	**Distribution/final circuits**		
6.1	Identification of conductors	✓	No
6.2	Cables correctly supported throughout their length	✓	No
6.3	Condition of insulation of live parts	✓	No
6.4	Non-sheathed cables protected by enclosures in conduit, ducting or trunking	✓	No
6.5	Suitability of containment systems for continued use (including flexible conduit)	✓	No
6.6	Cables correctly terminated in enclosures (indicate extent of sampling in Section D of report)	✓	No
6.7	Indication of SPD(s) continued functionality confirmed	N/A	No
6.8	Adequacy of AFDD(s), where specified	N/A	No
6.9	Confirmation that conductor connections, including connections to busbars are correctly located in terminals and are tight and secure	✓	No
6.10	Examination of cables for signs of unacceptable thermal and mechanical damage/deterioration	✓	No
6.11	Adequacy of cables for current-carrying capacity with regard to the type and nature of installation	✓	No
6.12	Adequacy of protective devices; type and rated current for fault protection	✓	No
6.13	Presence and adequacy of circuit protective conductors	✓	No
6.14	Co-ordination between conductors and overload protective devices	✓	No
6.15	Cable installation methods/practices appropriate to the type and nature of installation and external influences	✓	No
6.16	Cables where exposed to direct sunlight, of a suitable type or adequately protected against solar radiation	✓	No
6.17	Cables adequately protected against damage and abrasion	✓	No
6.18	Provision of additional protection by an RCD not exceeding 30 mA for:		
6.18.1	- all socket-outlets with a rated current not exceeding 32 A, unless exempt	C2 (see section K)	No
6.18.2	- supplies for mobile equipment with a rated current not exceeding 32 A for use outdoors	✓	No
6.18.3	- cables concealed in walls/partitions at a depth of less than 50 mm	✓	No
6.18.4	- cables concealed in walls/partitions containing metal parts regardless of depth	✓	No
6.18.5	- circuits supplying luminaires within domestic (household) premises	✓	No
	Note: Older installations designed prior to BS 7671: 2018 may not have been provided with RCDs for additional protection.		
6.19	Provision of fire barriers, sealing arrangements and protection against thermal effects	✓	No
6.20	Band II cables segregated/separated from Band I cables	✓	No
6.21	Cables segregated/separated from non-electrical services	✓	No
6.22	Termination of cables at enclosures (identify numbers and locations of items inspected in Section D):		
6.22.1	Connections under no undue strain	✓	No
6.22.2	No basic insulation of a conductor, visible outside an enclosure	✓	No
6.22.3	Connections of live conductors adequately enclosed	✓	No
6.22.4	Adequacy of connection at point of entry to enclosure	✓	No
6.23	Temperature rating of cable insulation adequate	✓	No
6.24	Condition of accessories including socket-outlets, switches and joint boxes satisfactory	✓	No
6.25	Suitability of accessories for external influences	C2 (see section K)	No
6.26	Single-pole switching or protective devices in line conductors only	✓	No
6.27	Adequacy of connections, including CPCs, within accessories and to fixed and stationary equipment	✓	No

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

Item No	Description	Outcome	Comments
7.0	**Isolation and switching**		
7.1	Isolators:		
7.1.1	Presence and condition of appropriate devices	✓	No
7.1.2	Acceptable location (local/remote)	✓	No
7.1.3	Capable of being secured in the OFF position	✓	No
7.1.4	Correct operation verified	✓	No
7.1.5	Clearly identified by position and/or durable markings	✓	No
7.1.6	Warning label posted in situations where live parts cannot be isolated by the operation of a single device	✓	No
7.2	Switching off for mechanical maintenance:		
7.2.1	Presence and condition of appropriate devices	✓	No
7.2.2	Acceptable location	✓	No
7.2.3	Capable of being secured in the OFF position	✓	No
7.2.4	Correct operation verified	✓	No
7.2.5	Clearly identified by position and/or durable marking(s)	✓	No
7.3	Emergency switching off/stopping:		
7.3.1	Presence and condition of appropriate devices	✓	No
7.3.2	Readily accessible for operation where danger might occur	✓	No
7.3.3	Correct operation verified	✓	No
7.4	Functional switching:		
7.4.1	Presence and condition of appropriate devices	✓	No
7.4.2	Correct operation (functionality) verified	✓	No
8.0	**Current-using equipment (permanently connected)**		
8.1	Condition of equipment in terms of IP rating	✓	No
8.2	Equipment does not constitute a fire hazard	✓	No
8.3	Enclosure not damaged/deteriorated so as to impair safety	✓	No
8.4	Suitability for the environment and external influences	✓	No
8.5	Security of fixing	✓	No
8.6	Cable entry holes in ceiling above luminaires, sized or sealed so as to restrict the spread of fire	✓	No
8.7	Recessed luminaires (e.g. downlighters):		
8.7.1	Correct type of lamps fitted	✓	No
8.7.2	Installed to minimise build-up of heat	✓	No
8.7.3	No signs of overheating to surrounding building fabric	✓	No
8.7.4	No signs of overheating to conductors/terminations	✓	No
9.0	**List all special installations or locations covered by this report**		

9.0	List all special installations or locations covered by this report cont...

Inspected By

Name: Ashley Pittman

Date: 10/09/2021

Signature:

Board Details

TO BE COMPLETED IN EVERY CASE		ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION			
Location of Distribution Board	StoresSquare D	Supply to distribution board is from:	SubMains(DB/MDP, 4/L1)	Associated RCD (if any) BS(EN)	N/A
		No of phases	1	Nominal Voltage 230 V	RCD No of Poles N/A
Distribution board designation	DB/STORE	Overcurrent protective device for the distribution circuit			
		Type BS(EN)	LIM LIM	Rating LIM A	RCD Rating N/A mA

Circuit Details

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max permitted disconnection times (s)	Overcurrent protective device					RCD	Maximum permitted Zs (Ω)
					Live mm²	cpc mm²		BS(EN)	AFDD	Type	Rating (A)	Short circuit capacity (kA)	Operating current (ΔIn)	
1/L1	Power - Nursery	D	B	5	2.5	1.5	0.4	61009 RCD/RCBO		B	20	6	30	2.19
2/L1	RCD Module Covering	-	-	-	-	-	-	-	-	-	-	-	-	-
3/L1	Power - Nursery	D	B	1	2.5	1.5	0.4	61009 RCD/RCBO		B	20	6	30	2.19
4/L1	RCD Module Covering	-	-	-	-	-	-	-	-	-	-	-	-	-
5/L1	Sockets - Stores/Large Office	D	B	7	2.5	1.5	0.4	61009 RCD/RCBO		B	16	6	N/A	2.73
6/L1	RCD Module Covering	-	-	-	-	-	-	-	-	-	-	-	-	-
7/L1	Sockets - Small Offices	A	B	4	2.5	1.5	0.4	60898 MCB		B	16	6	N/A	2.73
8/L1	Lights - Small Office	A	B	2	1	1	0.4	60898 MCB		B	6	6	N/A	7.28
9/L1	Lights - Stores/Large Office	D	B	13	1.5	1.5	0.4	60898 MCB		B	10	6	N/A	4.37
10/L1	Water Heater - Nursery WC	D	B	1	2.5	2.5	0.4	60898 MCB		B	20	6	N/A	2.19
11/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
12/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
13/L1	Lights - Nursery	D	B	11	1.5	1.5	0.4	60898 MCB		B	6	6	N/A	7.28
14/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
15/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
16/L1	Em Light - Bottom Of Ramp	D	B	1	1.5	1.5	0.4	60898 MCB		B	6	6	N/A	7.28

Wiring Code

A	B	C	D	E	F	G	H	O
PVC/PVC cables	PVC cables in metallic conduit	PVC cables in non-metallic conduit	PVC cables in metallic trunking	PVC cables in non-metallic trunking	PVC/SWA cables	XLPE/SWA cables	Mineral insulated cables	Other

Board Tests

TO BE COMPLETED IN EVERY CASE

Correct supply polarity confirmed ✓ Phase sequence confirmed (where appropriate) ✓

Supplementary Conductors ×

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs 0.24 Ω Ipf 0.80 kA

Operating times of associated RCD (if any) At I Δ n N/A ms

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	N/A	RCD	N/A
Insulation resistance	N/A	Multi-function	102056373
Continuity	N/A	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance					Polarity (v)	Maximum measured earth fault loop impedance Ω	RCD		AFDD Test button operation	Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Test Voltage	Live/ Live MΩ	Live/ Neutral MΩ	Live/ Earth MΩ	Earth/ Neutral MΩ			Operating time at I Δ n (ms)	Test button operation		
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)											
1/L1				0.11			200	200	200	200	✓	0.35	19	✓		NO
2/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/L1				0.17			200	200	200	200		0.35	19	✓		NO
4/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/L1				0.30			200	200	200	200	✓	0.59	N/A	N/A		NO
6/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/L1				0.34			200	200	200	200	✓	0.52	N/A	N/A		NO
8/L1				0.30			200	200	200	200	✓	0.58	N/A	N/A		NO
9/L1				0.13			200	200	200	200	✓	0.42	N/A	N/A		NO
10/L1				0.38			200	200	200	200	✓	0.46	N/A	N/A		NO
11/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13/L1				0.16			200	200	200	200	✓	0.42	N/A	N/A		NO
14/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16/L1				0.30			200	200	200	200	✓	0.56	N/A	N/A		NO

Tested By

Signature		Position	Electrician
Name	Ashley Pittman	Date of testing	07/09/2021

Board Details

TO BE COMPLETED IN EVERY CASE

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Location of Distribution Board: Main Library OfficeSquare D

Distribution board designation: DB/WORK ROOM

Supply to distribution board is from: SubMains(DB/MDP, 3/L1)

No of phases: 1 Nominal Voltage: 230 V

Overcurrent protective device for the distribution circuit

Type BS(EN): LIM LIM Rating: LIM A

Associated RCD (if any)

BS(EN): N/A

RCD No of Poles: N/A

RCD Rating: N/A mA

Circuit Details

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max permitted disconnection times (s)	Overcurrent protective device					RCD	Maximum permitted Zs (Ω)
					Live mm^2	cpc mm^2		BS(EN)	AFDD	Type	Rating (A)	Short circuit capacity (kA)	Operating current (ΔIn)	
1/L1	Lights - Main Library	D	B	10	1.5	MW	0.4	60898 MCB		B	10	6	N/A	4.37
2/L1	Lights - Entrance Stairs & O/S	D	B	14	1.5	MW	0.4	60898 MCB		B	6	6	N/A	7.28
3/L1	Sockets - Library, Office & Stairwell	D	B	12	2.5	MW	0.4	61009 RCD/RCBO		B	32	6	30	1.37
4/L1	Lights & Fans - WCs & Workroom Lift Lobby	D	B	10	1	1	0.4	60898 MCB		B	6	6	N/A	7.28
5/L1	Water Heater - Staff Gents WC	H	B	1	2.5	MICC	0.4	60898 MCB		B	16	6	N/A	2.73
6/L1	Fused Spur	D	B	1	2.5	MW	0.4	61009 RCD/RCBO		B	32	6	30	1.37
7/L1	Lights - Work Room & Corrior	D	B	7	1.5	MW	0.4	60898 MCB		B	10	6	N/A	4.37
8/L1	Ring Main - WCs Hand Dryers & Heaters	C	B	6	2.5	2.5	0.4	61009 RCD/RCBO		C	32	6	30	0.68
9/L1	Pillar Sockets - Work Room	D	B	3	2.5	MW	0.4	61009 RCD/RCBO		B	20	6	30	2.19
10/L1	Em Lights - Work Room & Corrior	D	B	2	1.5	MW	0.4	60898 MCB		B	6	6	N/A	7.28
11/L1	Lights - Main Library	D	B	7	1.5	MW	0.4	60898 MCB		B	6	6	N/A	7.28
12/L1	Door Access PSU	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO		B	20	6	30	2.19
13/L1	Alarm - In Corridor	D	B	1	1.5	MW	0.4	60898 MCB		B	6	6	N/A	7.28
14/L1	Circuit Isolated	D	B	...	1	MW	0.4	60898 MCB		B	10	6	N/A	4.37
15/L1	Fused Spur	D	B	1	2.5	MW	0.4	60898 MCB		B	10	6	N/A	4.37
16/L1	Circuit Isolated	D	B	...	2.5	MW	0.4	61009 RCD/RCBO		B	16	6	30	2.73
17/L1	Water Heater - Ladies WC	D	B	1	2.5	MW	0.4	60898 MCB		B	16	6	N/A	2.73
18/L1	Security Barrier & Auto Doors	H	B	2	2.5	MICC	0.4	60898 MCB		C	16	6	N/A	1.37
19/L1	Display Lighting - External	D	B	4	1.5	MW	0.4	60898 MCB		C	6	6	N/A	3.64
20/L1	Socket - Kitchen	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO		B	20	6	30	2.19
21/L1	Lights - Main Library	D	B	8	1.5	MW	0.4	60898 MCB		B	6	6	N/A	7.28
22/L1	Water Heater - Staff Room	D	B	1	2.5	MW	0.4	60898 MCB		B	16	6	N/A	2.73
23/L1	Water Heater - Public WC	D	B	1	4	1.5	0.4	60898 MCB		C	20	6	N/A	1.09
24/L1	Untraced	D	B	...	1.5	MW	0.4	60898 MCB		B	20	6	N/A	2.19

Wiring Code

A	B	C	D	E	F	G	H	O
PVC/PVC cables	PVC cables in metallic conduit	PVC cables in non-metallic conduit	PVC cables in metallic trunking	PVC cables in non-metallic trunking	PVC/SWA cables	XLPE/SWA cables	Mineral insulated cables	Other

Board Tests

TO BE COMPLETED IN EVERY CASE

Correct supply polarity confirmed ✓ Phase sequence confirmed (where appropriate) ✓

Supplementary Conductors ×

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs 0.25 Ω Ipf 1.08 kA

Operating times of associated RCD (if any) At I Δ n N/A ms

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	N/A	RCD	N/A
Insulation resistance	N/A	Multi-function	102056373
Continuity	N/A	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance					Polarity (v)	Maximum measured earth fault loop impedance Ω	RCD		AFDD Test button operation	Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Test Voltage	Live/ Live MΩ	Live/ Neutral MΩ	Live/ Earth MΩ	Earth/ Neutral MΩ			Operating time at I Δ n (ms)	Test button operation		
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)											
1/L1				1.19		250	200	200	200	200	✓	1.42	N/A	N/A		NO
2/L1				1.10		250	200	200	200	200	✓	1.36	N/A	N/A		NO
3/L1	0.55	0.56	N/A	0.17		250	200	200	200	200	✓	0.41	93	✓		NO
4/L1				0.70		250	200	200	200	200	✓	0.93	N/A	N/A		NO
5/L1				0.13		250	200	200	200	200	✓	0.37	N/A	N/A		NO
6/L1				0.20		250	200	200	200	200	✓	0.44				NO
7/L1				0.50		250	200	200	200	200	✓	0.79	N/A	N/A		NO
8/L1	0.48	0.48	0.55	0.09		250	200	200	200	200	✓	0.34	50	✓		NO
9/L1				0.05		250	200	200	200	200	✓	0.27	34	✓		NO
10/L1				0.13		250	200	200	200	200	✓	0.36	N/A	N/A		NO
11/L1				1.20		250	200	200	200	200	✓	1.45	N/A	N/A		NO
12/L1				0.04		250	200	200	200	200	✓	0.26	89	✓		NO
13/L1				0.05		250	200	200	200	200	✓	0.29	N/A	N/A		NO
14/L1				LIM		250	200	200	200	200		...	N/A	N/A		NO
15/L1				0.20		250	200	200	200	200	✓	0.59	N/A	N/A		NO
16/L1				LIM		250	200	200	200	200		...				NO
17/L1				0.12		250	200	200	200	200	✓	0.33	N/A	N/A		NO
18/L1				0.22		250	200	200	200	200	✓	0.43	N/A	N/A		NO
19/L1				LIM		250	200	200	200	200		...	N/A	N/A		NO
20/L1				0.06		250	200	200	200	200	✓	0.30	80	✓		NO
21/L1				1.25		250	200	200	200	200	✓	1.42	N/A	N/A		NO
22/L1				0.10		250	200	200	200	200	✓	0.35	N/A	N/A		NO
23/L1				0.50		250	200	200	200	200	✓	0.64	N/A	N/A		NO
24/L1				...		250	200	200	200	200		...	N/A	N/A		NO

Tested By

Signature  Position Electrician

Name Ashley Pittman Date of testing 07/09/2021

Board Details

TO BE COMPLETED IN EVERY CASE		ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION		
Location of Distribution Board	Childrens LibrarySquare D	Supply to distribution board is from:	SubMains(DB/MDP, 3/L2)	Associated RCD (if any)
		No of phases: 1	Nominal Voltage: 230 V	BS(EN): N/A
Distribution board designation	DB/CHILDRENS	Overcurrent protective device for the distribution circuit		RCD No of Poles: N/A
		Type BS(EN): LIM LIM	Rating: LIM A	RCD Rating: N/A mA

Circuit Details

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max permitted disconnection times (s)	Overcurrent protective device					RCD	Maximum permitted Zs (Ω)
					Live mm²	cpc mm²		BS(EN)	AFDD	Type	Rating (A)	Short circuit capacity (kA)	Operating current (IΔn)	
1/L2	Ring Main - Drop In Area	A	B	16	2.5	1.5	0.4	61009 RCD/RCBO		B	32	10	30	1.37
2/L2	Lights - Local Studies	A	B	4	1.5	1.0	0.4	60898 MCB		B	6	6	N/A	7.28
3/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
4/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
5/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L2	Em Light - Exit Box Local Studies	A	B	1	1.5	1.0	0.4	60898 MCB		B	6	10	N/A	7.28
7/L2	Heaters - General	A	B	7	2.5	1.5	0.4	61009 RCD/RCBO		B	16	10	30	2.73
8/L2	Lights - Local Studies	A	B	4	1.5	1.0	0.4	60898 MCB		B	6	10	N/A	7.28
9/L2	Lights - Childrens Area	A	B	8	1.5	1.0	0.4	60898 MCB		B	10	10	N/A	4.37
10/L2	Lights - Childrens Area	A	B	7	1.5	1.0	0.4	60898 MCB		B	10	10	N/A	4.37
11/L2	Lights - Staff Room & WCs	A	B	7	1.5	1.0	0.4	60898 MCB		B	6	10	N/A	7.28
12/L2	Lights - Drop In Area	A	B	8	1.5	1.0	0.4	60898 MCB		B	6	10	N/A	7.28
13/L2	Ring Main - Local Studies	A	B	10	2.5	1.5	0.4	61009 RCD/RCBO		B	32	10	30	1.37
14/L2	Sockets - Main Library Self Checkout	A	B	2	2.5	1.5	0.4	61009 RCD/RCBO		B	20	10	30	2.19
15/L2	Ring Main - Far End	A	B	14	2.5	1.5	0.4	61009 RCD/RCBO		D	32	10	30	0.34
16/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
17/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
18/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-

Wiring Code

A	B	C	D	E	F	G	H	O
PVC/PVC cables	PVC cables in metallic conduit	PVC cables in non-metallic conduit	PVC cables in metallic trunking	PVC cables in non-metallic trunking	PVC/SWA cables	XLPE/SWA cables	Mineral insulated cables	Other

Board Tests

TO BE COMPLETED IN EVERY CASE

Correct supply polarity confirmed ✓ Phase sequence confirmed (where appropriate) ✓

Supplementary Conductors ×

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs 0.19 Ω Ipf 1.23 kA

Operating times of associated RCD (if any) At I Δ n N/A ms

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	N/A	RCD	N/A
Insulation resistance	N/A	Multi-function	102056373
Continuity	N/A	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance					Polarity (v)	Maximum measured earth fault loop impedance Ω	RCD		AFDD Test button operation	Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Test Voltage	Live/ Live MΩ	Live/ Neutral MΩ	Live/ Earth MΩ	Earth/ Neutral MΩ			Operating time at I Δ n (ms)	Test button operation		
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)											
1/L2	0.90	0.93	1.27	0.33		250	200	200	200	200	✓	0.51	90	✓		NO
2/L2				1.64		250	200	200	200	200	✓	1.81	N/A	N/A		NO
3/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L2				0.60		250	200	200	200	200	✓	0.80	N/A	N/A		NO
7/L2				0.33		250	200	200	200	200	✓	0.51	36.2			NO
8/L2				1.98		250	200	200	200	200	✓	2.10	N/A	N/A		NO
9/L2				1.25		250	200	200	200	200	✓	1.42	N/A	N/A		NO
10/L2				1.25		250	200	200	200	200	✓	1.42	N/A	N/A		NO
11/L2				1.02		250	200	200	200	200	✓	1.19	N/A	N/A		NO
12/L2				0.49		250	200	200	200	200	✓	0.67	N/A	N/A		NO
13/L2	>200	>200	>200	0.25		250	200	200	200	200	✓	0.42	50	✓		NO
14/L2				0.34		250	200	200	200	200	✓	0.53	100	✓		NO
15/L2	0.58	0.58	0.97	0.40		250	200	200	200	200	✓	0.59	86	✓		NO
16/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Tested By

Signature [signature] Position Electrician

Name Ashley Pittman Date of testing 07/09/2021

Board Details

TO BE COMPLETED IN EVERY CASE	ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION	
Location of Distribution Board: Lift RoomBill	Supply to distribution board is from: N/A	Associated RCD (if any)
Distribution board designation: DB/MDP	No of phases: N/A — Nominal Voltage: N/A V	BS(EN): N/A
	Overcurrent protective device for the distribution circuit	RCD No of Poles: N/A
	Type BS(EN): N/A — Rating: N/A A	RCD Rating: N/A mA

Circuit Details

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max permitted disconnection times (s)	Overcurrent protective device					RCD	Maximum permitted Zs (Ω)
					Live mm²	cpc mm²		BS(EN)	AFDD	Type	Rating (A)	Short circuit capacity (kA)	Operating current (IΔn)	
1/TP	Sub Mains(DB/BOILER HOUSE)	B	B	1	16.0	MW	5	LIM		LIM	LIM	LIM	N/A	...
2/L1	Old Lift Room Socket	B	B	1	10.0	10.0	5	LIM		LIM	LIM	LIM	N/A	...
2/L2	Redundant Lift Supply	B	B	1	10.0	10.0	5	LIM		LIM	LIM	LIM	N/A	...
2/L3	Fire Alarm	A	C	1	4.0	1.5	0.4	LIM		LIM	LIM	LIM	N/A	...
3/L1	Sub Mains(DB/WORK ROOM)	B	B	1	16.0	6	5	LIM		LIM	LIM	LIM	N/A	...
3/L2	Sub Mains(DB/CHILDRENS)	B	B	1	16.0	6	5	LIM		LIM	LIM	LIM	N/A	...
3/L3	Sub Mains(DB/SERVER ROOM A)	G	C	1	10.0	10.0	5	LIM		LIM	LIM	LIM	N/A	...
4/L1	Sub Mains(DB/STORE)	F	B	1	10.0	10.0	5	LIM		LIM	LIM	LIM	N/A	...
4/L2	Outside Lights	A	B	2	1.5	1.0	0.4	LIM		LIM	LIM	LIM	N/A	...
4/L3	Sub Mains(DB/SERVER ROOM B)	G	C	1	10.0	10.0	5	LIM		LIM	LIM	LIM	N/A	...

Wiring Code

A	B	C	D	E	F	G	H	O
PVC/PVC cables	PVC cables in metallic conduit	PVC cables in non-metallic conduit	PVC cables in metallic trunking	PVC cables in non-metallic trunking	PVC/SWA cables	XLPE/SWA cables	Mineral insulated cables	Other

Board Tests

TO BE COMPLETED IN EVERY CASE

Correct supply polarity confirmed ✓ Phase sequence confirmed (where appropriate) ✓

Supplementary Conductors ×

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs N/A Ω Ipf N/A kA

Operating times of associated RCD (if any) At I Δ n N/A ms

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	N/A	RCD	N/A
Insulation resistance	N/A	Multi-function	102056373
Continuity	N/A	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance					Polarity (v)	Maximum measured earth fault loop impedance Ω	RCD		AFDD Test button operation	Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Test Voltage	Live/ Live MΩ	Live/ Neutral MΩ	Live/ Earth MΩ	Earth/ Neutral MΩ			Operating time at I Δ n (ms)	Test button operation		
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)											
1/TP											✓	0.20	N/A	N/A		NO
2/L1											✓	0.22	N/A	N/A		NO
2/L2											✓	0.24	N/A	N/A		NO
2/L3											✓	0.22	N/A	N/A		NO
3/L1											✓	0.25	N/A	N/A		NO
3/L2											✓	0.19	N/A	N/A		NO
3/L3											✓	0.23	N/A	N/A		NO
4/L1											✓	0.24	N/A	N/A		NO
4/L2											✓	0.55	N/A	N/A		NO
4/L3											✓	0.28	N/A	N/A		NO

Tested By

Signature [signature] Position Electrician

Name Ashley Pittman Date of testing 07/09/2021

Board Details

TO BE COMPLETED IN EVERY CASE	ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION	
Location of Distribution Board: Lift RoomSquare D Iso	Supply to distribution board is from: N/A	Associated RCD (if any)
Distribution board designation: LIFT ISO	No of phases: N/A Nominal Voltage: N/A V	BS(EN): N/A
	Overcurrent protective device for the distribution circuit	RCD No of Poles: N/A
	Type BS(EN): N/A Rating: N/A A	RCD Rating: N/A mA

Circuit Details

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max permitted disconnection times (s)	Overcurrent protective device					RCD	Maximum permitted Zs (Ω)
					Live mm²	cpc mm²		BS(EN)	AFDD	Type	Rating (A)	Short circuit capacity (kA)	Operating current (IΔn)	
1/TP	Lift Supply	G	C	1	10.0	SWA	0.4	88-2 Fuse HRC		gG	32	80	N/A	0.99

Wiring Code

A	B	C	D	E	F	G	H	O
PVC/PVC cables	PVC cables in metallic conduit	PVC cables in non-metallic conduit	PVC cables in metallic trunking	PVC cables in non-metallic trunking	PVC/SWA cables	XLPE/SWA cables	Mineral insulated cables	Other

Board Tests

TO BE COMPLETED IN EVERY CASE

Correct supply polarity confirmed: N/A

Phase sequence confirmed (where appropriate): N/A

Supplementary Conductors: ×

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs: N/A Ω Ipf: N/A kA

Operating times of associated RCD (if any) At I Δ n: N/A ms

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	N/A	RCD	N/A
Insulation resistance	N/A	Multi-function	102056373
Continuity	N/A	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance					Polarity (√)	Maximum measured earth fault loop impedance Ω	RCD		AFDD Test button operation	Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Test Voltage	Live/ Live MΩ	Live/ Neutral MΩ	Live/ Earth MΩ	Earth/ Neutral MΩ			Operating time at I Δ n (ms)	Test button operation		
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)											
1/TP				0.12		250	200	200	200	200	✓	0.29	N/A	N/A		NO

Tested By

Signature:

Position: Electrician

Name: Mike Tales

Date of testing: 07/09/2021

Board Details

TO BE COMPLETED IN EVERY CASE		ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION			
Location of Distribution Board	Server RoomMEM	Supply to distribution board is from:	SubMains(DB/MDP, 3/L3)	Associated RCD (if any) BS(EN)	N/A
		No of phases	1	Nominal Voltage 230 V	RCD No of Poles N/A
Distribution board designation	DB/SERVER ROOM A	Overcurrent protective device for the distribution circuit			
		Type BS(EN)	LIM LIM	Rating LIM A	RCD Rating N/A mA

Circuit Details

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max permitted disconnection times (s)	Overcurrent protective device					RCD	Maximum permitted Zs (Ω)
					Live mm²	cpc mm²		BS(EN)	AFDD	Type	Rating (A)	Short circuit capacity (kA)	Operating current (IΔn)	
1/L3	Double Socket	A	B	1	2.5	1.5	0.4	60898 MCB		B	20	10	N/A	2.19
2/L3	Commando Socket - 1	B	B	1	2.5	1.5	0.4	60898 MCB		B	16	10	N/A	2.73
3/L3	Lights - Server Room	A	B	1	1.0	1.0	0.4	60898 MCB		B	6	10	N/A	7.28
4/L3	Commando Socket - 2	B	B	1	2.5	1.5	0.4	60898 MCB		B	16	10	N/A	2.73
5/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-

Wiring Code

A	B	C	D	E	F	G	H	O
PVC/PVC cables	PVC cables in metallic conduit	PVC cables in non-metallic conduit	PVC cables in metallic trunking	PVC cables in non-metallic trunking	PVC/SWA cables	XLPE/SWA cables	Mineral insulated cables	Other

Board Tests

TO BE COMPLETED IN EVERY CASE

Correct supply polarity confirmed ✓ Phase sequence confirmed (where appropriate) ✓

Supplementary Conductors ×

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs 0.23 Ω Ipf 0.98 kA

Operating times of associated RCD (if any) At $I\Delta n$ N/A ms

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	N/A	RCD	N/A
Insulation resistance	N/A	Multi-function	102056373
Continuity	N/A	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance					Polarity (v)	Maximum measured earth fault loop impedance Ω	RCD		AFDD Test button operation	Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Test Voltage	Live/ Live MΩ	Live/ Neutral MΩ	Live/ Earth MΩ	Earth/ Neutral MΩ			Operating time at $I\Delta n$ (ms)	Test button operation		
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)											
1/L3				0.16		250	200	200	200	200	✓	0.36	N/A	N/A		NO
2/L3				0.07		250	200	200	200	200	✓	0.29	N/A	N/A		NO
3/L3				0.49		250	200	200	200	200	✓	0.68	N/A	N/A		NO
4/L3				0.10		250	200	200	200	200	✓	0.30	N/A	N/A		NO
5/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Tested By

Signature [signature] Position Electrician

Name Ashley Pittman Date of testing 07/09/2021

Board Details

TO BE COMPLETED IN EVERY CASE		ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION			
Location of Distribution Board	Server RoomMEM	Supply to distribution board is from:	SubMains(DB/MDP, 4/L3)	Associated RCD (if any) BS(EN)	N/A
Distribution board designation	DB/SERVER ROOM B	No of phases	1	Nominal Voltage	230 V
		Overcurrent protective device for the distribution circuit Type BS(EN)	LIM LIM	Rating	LIM A
				RCD No of Poles	N/A
				RCD Rating	N/A mA

Circuit Details

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max permitted disconnection times (s)	Overcurrent protective device					RCD	Maximum permitted Zs (Ω)
					Live mm²	cpc mm²		BS(EN)	AFDD	Type	Rating (A)	Short circuit capacity (kA)	Operating current (IΔn)	
1/L3	Air Con Unit - Server Rooom	G	C	2	6.0	6.0	0.4	60898 MCB		B	32	10	N/A	1.37
2/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
3/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
4/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
5/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-

Wiring Code

A	B	C	D	E	F	G	H	O
PVC/PVC cables	PVC cables in metallic conduit	PVC cables in non-metallic conduit	PVC cables in metallic trunking	PVC cables in non-metallic trunking	PVC/SWA cables	XLPE/SWA cables	Mineral insulated cables	Other

Board Tests

TO BE COMPLETED IN EVERY CASE

Correct supply polarity confirmed ✓ Phase sequence confirmed (where appropriate) ✓

Supplementary Conductors ×

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs 0.28 Ω Ipf 0.91 kA

Operating times of associated RCD (if any) At $I\Delta n$ N/A ms

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	N/A	RCD	N/A
Insulation resistance	N/A	Multi-function	102056373
Continuity	N/A	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance					Polarity (v)	Maximum measured earth fault loop impedance Ω	RCD		AFDD Test button operation	Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Test Voltage	Live/ Live MΩ	Live/ Neutral MΩ	Live/ Earth MΩ	Earth/ Neutral MΩ			Operating time at $I\Delta n$ (ms)	Test button operation		
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)											
1/L3				0.25		250	200	200	200	200	✓	0.50	N/A	N/A		NO
2/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Tested By

Signature		Position	Electrician
Name	Ashley Pittman	Date of testing	07/09/2021

Board Details

TO BE COMPLETED IN EVERY CASE		ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION		
Location of Distribution Board	Boiler Room	Supply to distribution board is from:	N/A	Associated RCD (if any)
		No of phases 3	Nominal Voltage 400 V	BS(EN) N/A
Distribution board designation	DB/BOILER ROOM	Overcurrent protective device for the distribution circuit		RCD No of Poles N/A
		Type BS(EN) N/A	Rating N/A A	RCD Rating N/A mA

Circuit Details

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max permitted disconnection times (s)	Overcurrent protective device					RCD	Maximum permitted Zs (Ω)
					Live mm²	cpc mm²		BS(EN)	AFDD	Type	Rating (A)	Short circuit capacity (kA)	Operating current (IΔn)	
1/L1	Lights - Boiler Room & Car Park	B	B	7	1.5	MW	0.4	60898 MCB		B	10	10	N/A	4.37
1/L2	People Counter Spur - Entrance Lobby	H	C	2	1.5	MW	0.4	60898 MCB		B	6	10	N/A	7.28
1/L3	Boiler Panel	D	B	1	6.0	6.0	5	60898 MCB		B	32	10	N/A	1.37
2/TP	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
3/L1	Sockets - Boiler Room	A	B	2	4.0	1.5	0.4	61009 RCD/RCBO		C	16	10	30	1.37
3/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
3/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
4/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-
4/L2	Auto Door - Main Entrance	F	C	1	4.0	SWA	0.4	60898 MCB		C	16	10	N/A	1.37
4/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	-

Wiring Code

A	B	C	D	E	F	G	H	O
PVC/PVC cables	PVC cables in metallic conduit	PVC cables in non-metallic conduit	PVC cables in metallic trunking	PVC cables in non-metallic trunking	PVC/SWA cables	XLPE/SWA cables	Mineral insulated cables	Other

Board Tests

TO BE COMPLETED IN EVERY CASE

Correct supply polarity confirmed ✓ Phase sequence confirmed (where appropriate) ✓

Supplementary Conductors ×

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs 0.20 Ω Ipf 2.38 kA

Operating times of associated RCD (if any) At I Δ n N/A ms

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	N/A	RCD	N/A
Insulation resistance	N/A	Multi-function	102056373
Continuity	N/A	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance					Polarity (v)	Maximum measured earth fault loop impedance Ω	RCD		AFDD Test button operation	Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Test Voltage	Live/ Live MΩ	Live/ Neutral MΩ	Live/ Earth MΩ	Earth/ Neutral MΩ			Operating time at I Δ n (ms)	Test button operation		
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)											
1/L1				0.77			200	200	200	200	✓	0.93	N/A	N/A		NO
1/L2				0.36			200	200	200	200	✓	0.43	N/A	N/A		NO
1/L3				0.23			200	200	200	200	✓	0.27	N/A	N/A		NO
2/TP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/L1				0.14			200	200	200	200	✓	0.32	19	✓		NO
3/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/L2				0.25		250	200	200	200	200	✓	0.43	N/A	N/A		NO
4/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Tested By

Signature [signature] Position Electrician

Name Ashley Pittman Date of testing 10/09/2021

Observations Continued from Page 2

Item No	Description	Code
6	5 Distribution equipment 5.9 Presence of main switch(es), linked where required	C3
7	5 Distribution equipment 5.14 RCD(s) provided for additional protection - includes RCBOs	C2
8	5 Distribution equipment 5.19 Presence of diagrams, charts or schedules at or near equipment, where required	C3
9	6 Distribution/final circuits 6.18.1 - all socket-outlets with a rated current not exceeding 32 A, unless exempt	C2
10	6 Distribution/final circuits 6.25 Suitability of accessories for external influences	C2
11	No main switch to isolate the entire installation - 1 main switch does DB/MDB and the other does the new lift supply	C3
12	DB/MDP - Asbestos flash guards within fuse carriers. This should be removed asap and before any of the fuses are pulled under load. Recommend DB to be upgraded/replaced	C2
13	Old lift isolator - Asbestos flash guards within fuse carriers. This should be removed asap and before any of the fuses are pulled under load. Recommend to be replaced	C2
14	Old lift isolator - 20/25 mm hole in bottom of isolator	C2
15	DB1 3L1 - Ring main not extended correctly, two spurred circuits coming off it. Landing double socket.	C2
16	Two conduit lids required in work room. Single insulated cables exposed.	C2
17	Two spurs next to upstairs auto doors have no flex outlet inserts fitted.	C3
18	DB1 - 4L1 CPC not terminated to anything in back of switch. Store room.	C3
19	DB/STORE - CCT-3 Socket on reverse of wall from DB is showing missing neutral	C2
20	DB/STORE - CCT-7 No RCD Coverage on sockets	C2
21	Store/Large Office Light switch at bottom of ramp has no earth to it at-all and cpcs have been cut out	C2
22	DB/CHILDRENS - CCT-13 No continuity on ring final circuit across all conductors	C2
23	DB/CHILDRENS -16L2 Cant trace	C2
24	DB/WORK ROOM -24L1 Cant trace	C2
25	DB/WORKSHOP -6L1 RCD failed	C2

Code Key

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

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 E). The Report should identify any damage, deterioration, defects and/or conditions which may give rise to danger (see Section K).

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 D (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 D.

7. For items classified in Section K 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 K 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 K 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 F).

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