ELECTRICAL INSTALLATION CONDITION REPORT

(Requirements for Electrical Installations - BS 7671) Report No: 16 16H024

Section A: Details of the person ordering the work

Name: .....

Address: .....

.....

..... Postcode: .....

Section B: Reason for producing this report

ELECTRICAL SAFETY CERTIFICATE

Date(s) on which the inspection and testing was carried out: 16-11-23

Section C: Details of the installation which is the subject of this report

Occupier: HEATH UNITED REFORMED CHURCH

Address: MANOR DRIVE
HALIFAX

(USE BLOCK LETTERS) Postcode: .....

Description of premises:
Residential ☐ Commercial ☑ Industrial ☐ Other (Briefly describe) ☐ .....

Estimated age of wiring system ..... years

Evidence of additions/alterations? Yes ☐ No ☐ Not apparent ☐ If yes, estimate age ..... years

Installation records available? (Regulation 651.1) Yes ☐ No ☑ Date of last inspection ..... (date)

Section D: Extent and Limitations of Inspection and Testing

Extent of installation covered by this report ..... DBH CHURCH AREA FRONT ENTRANCE

Agreed limitations including the reasons (see Regulation 653.2) .....

Agreed with ..... Operational limitations including the reason(s) (see page no .....) ..... NONE

The inspection and testing detailed in this report and accompanying schedules have been carried out in accordance with BS 7671:2018 as amended to 2013

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.

Section E: Summary of the Condition of the Installation

General condition of the installation (in terms of electrical safety) ..... GOOD THROUGHOUT

Overall assessment of the installation in terms of its suitability for continued use SATISFACTORY/~~UNSATISFACTORY~~* (Delete as appropriate)

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

Section F: 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 classed 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). Observations classified as 'Improvement recommended' (code C3) 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 15/11/28 (date) for the following reason(s) .....

.....

Section G: Declaration

I/We being the person(s) responsible for the inspection and testing of the electrical installation (as indicated by my/our signatures shown adjacent), particulars of which are described above, having exercised reasonable skill and care when carrying out the inspection and testing, hereby declare that the information on 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.

Inspected and tested by: (USE BLOCK LETTERS)

Name: HOWARD ROSE

Signature: Howard Rose

For/on behalf of: LEPOL FIRE + SECURITY

Position: ELECTRICIAN

Address: UNIT HM 25
HOLMFIELD MILLS

Postcode: HX3 6SN Date: 16-11-23

Report authorised by: (USE BLOCK LETTERS)

Name: .....

Signature: .....

For/on behalf of: .....

Position: .....

Address: .....

.....

Postcode: ..... Date: .....

Section H: Schedules

..... Inspection Schedule(s) and ..... Schedule(s) of Circuit Details and Test Results are attached.

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

Earthing arrangements	Number and Type of Live Conductors		Nature of Supply Parameters		Supply Protective Device		Other Sources of Supply
TN-C ☐	AC ☑	DC ☐	Nominal voltage, U / U_0 (1)	230 V	BS (EN)	60898	Details of supply source:
TN-S ☐	1-phase, 2-wire ☑	2-wire ☐	Nominal frequency, f (1)	50 Hz	Type	B	Power rating of supply source kW
TN-C-S ☑	2-phase, 3-wire ☐	3-wire ☐	Prospective fault current, I_{pf} (2)	1.13 kA	Rated current	80 A	Prospective fault current, I_{pf} kA
TT ☐	3-phase, 3-wire ☐	Other ☐	External earth fault loop impedance, Z_e (2)	0.11 Ω			Electrode resistance to earth Ω
IT ☐	3-phase, 4-wire ☐						(See further details on attached schedule)
	Confirmation of supply polarity ☑						

Note: (1) by enquiry (2) by enquiry or by measurement

Section J: Particulars Of Installation Referred To In The Report

Means of Earthing	Maximum Demand	Details of Installation Earth Electrode (where applicable)
Distributor's facility ☑	Maximum demand (load) 75 ~~kW~~ / A	Location of earth electrode
Installation earth electrode ☐	(Delete as appropriate)	Type of earth electrode (e.g. rod(s), tape etc.) Electrode resistance to Earth Ω

Main Protective Conductors

Earthing conductor	Main protective bonding conductors	Main protective bonding conductors connected to:	
Material COPPER csa 16 mm²	Material COPPER csa 10 mm²	Metallic water installation pipes ☑	Structural steel ☐
Connection / continuity verified ☑	Connection / continuity verified ☑	Metallic gas installation pipes ☑	Lightning protection ☐
		Metallic oil installation pipes ☐	Other:

Main switch / Switch-fuse / Circuit-breaker / RCD

			If RCD is the main switch	
Location: CHURCH ENTRANCE	Current rating 100 A		RCD Type	Rated time delay ms
BS (EN) 60439-3	Fuse / device rating or setting 100 A		Rated residual operating current ($I_{\Delta n}$) mA	Measured operating time ms
No of poles TWO	Voltage rating 230/400 V			

Section K: Observation(s)

Referring to the attached inspection schedule(s) and schedule(s) of circuit details and test results, and subject to the limitations specified at the Extent and Limitations of Inspection and Testing section.

No remedial action is required ☑ The following observations are made ☐ (see below)

Observations(s): Include schedule reference as appropriate			

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 - Potential dangerous - urgent remedial action required
C3 - Improvement recommended
FI - Further investigation required without delay

This report is based on Part 6 of BS 7671 as amended

Distribution Board Details

DB reference: DB4

Location: CHURCH ENTRANCE Supplied from: DB1

Distribution circuit OCPD: BS(EN) _____ Type: _____ Rating/Setting: _____

SPD Details Type(s)*: T1 ☐ T2 ☐ T3† ☐ N/A ☑

Notes

* Where combined T1 + T2 or T2 + T3 device is installed, indicate by ticking both type boxes.

† Where a T3 SPD is installed to protect sensitive equipment, enter its details in the 'Remarks' column of this schedule. (See Section 534 of BS 7671 as amended)

§ Where the maximum permitted earth fault loop impedance value stated in column 12 is taken from a source other than Chapter 41 of BS 7671 (as amended), state the source of the data for the circuit in the 'Remarks' column.

Test Result Details

Circuit number	Circuit description	Conductor details				Overcurrent protective device					RCD device details			
		Type of wiring	Number of points served	Number & size		BS (EN)	Type	Rating (A)	Breaking capacity (kA)	Maximum permitted Z_s (Ω)§	BS (EN)	Type	$I_{\Delta n}$ (mA)	Rating (A)
				Live (mm^2)	cpc (mm^2)									
1	LADIES HAND DRYER	A	1	2.5	1.5	60898	B	16	6	1.71				
2	SOCKET BEHIND PODIUM	A	1	2.5	1.5	60898	B	16	6	1.71				
3	KITCHEN WATER HEATER	A	1	2.5	1.5	60898	B	16	6	1.71				
4	MENS HAND DRYER	A	1	2.5	1.5	60898	B	20	6	1.71				
5	PELMET LIGHTING	A	3	1.5	1.0	60898	B	6	6	1.71				
6	NEAR & FAR SIDE LIGHTS	A	6	1.5	1.0	60898	B	6	6	1.71				
7	MIDDLE & SPOT LIGHTS	A	8	1.5	1.0	60898	B	6	6	1.71				
8	STAGE, SIDE ROOMS & PICTURE LIGHTS	A	6	1.5	1.0	60898	B	6	6	1.71				
9	ENTRANCE + SIDE STAIRS LIGHTS	A	6	1.5	1.0	60898	B	6	6	1.71				
~~10~~13	HALL & KITCHEN SKTS	A	4	2×2.5	2×1.5	60898	B	20	6	1.71				
14	HALL SOCKETS	A	2	2×2.5	2×1.5	60898	B	20	6	1.71				
15	ENTRANCE + R.H STAIRS SKTS	A	2	2.5	1.5	60898	B	20	6	1.71				
16	TOP FLOOR SKT ~~& BOILER IN KITCHEN~~	A	1	2.5	1.5	60898	B	32	6	1.71				

Codes for Types of Wiring

A	B	C	D	E	F	G	H	O
Thermoplastic insulated/ sheathed cables	Thermoplastic cables in metallic conduit	Thermoplastic cables in non-metallic conduit	Thermoplastic cables in metallic trunking	Thermoplastic cables in non- metallic trunking	Thermoplastic SWA cables	Thermosetting SWA cables	Mineral insulated cables	Other - please state _____

DB reference: DB 4 Z_{db} 0·11 Ω 1ϕ I_{pf} 1·13 kA 3ϕ I_{pf} ____ kA

Confirmed: Correct polarity ✓ Phase sequence ☐

SPD: Operational status confirmed ☐ N/A ✓ Note: Not all SPDs have visible functionality indication.

Tested by (Capitals): HOWARD ROSE

Signature: Howard Rose Date: 16-11-23.

Test Result Details

Circuit number	Continuity (Ω)					Insulation resistance (MΩ)							✓ or ×	Zs (Ω)	RCD		AFDD	Remarks
	Ring final circuit			(R1 + R2) or R2 (Complete one column)		Single-phase			Three-phase									
	r_1 (line)	r_n (neutral)	r_2 (cpc)	$(R_1 + R_2)$	R_2	Test voltage (V)	Live - Live	Live - Earth	$L_1 + L_2 + L_3 + N$ to E	$L_1 + L_2 + L_3$ to N	$L_1 + L_2$ to L_3	L_1 to L_2	Polarity#	Maximum measured	Disconnection time (ms)**	Test button operation (✓)	Manual test button operation (✓)	Include details of circuits and/or installed equipment vulnerable to damage when testing (Continue on a separate sheet if necessary)
1	—	—	—	—	·09	500	—	>200	—	—	—	—	✓	·19	—	—	✓	
2	—	—	—	—	·04	500	—	>200	—	—	—	—	✓	·09	—	—	✓	
3	—	—	—	—	·18	500	—	>200	—	—	—	—	✓	·29	—	—	✓	
4	—	—	—	—	·22	500	—	>200	—	—	—	—	✓	·37	—	—	✓	
5	—	—	—	—	·08	500	—	>200	—	—	—	—	✓	·15	—	—	✓	LED LIGHTING.
6	—	—	—	—	·18	500	—	>200	—	—	—	—	✓	·29	—	—	✓	
7	—	—	—	—	·14	500	—	>200	—	—	—	—	✓	·22	—	—	✓	
8	—	—	—	—	·09	500	—	>200	—	—	—	—	✓	·21	—	—	✓	
9	—	—	—	—	·28	500	—	>200	—	—	—	—	✓	·39	—	—	✓	
13	·11	·11	·23	·34	—	500	0	>200	—	—	—	—	✓	·48	18	✓	✓	
14	·12	·12	·25	·39	—	500	0	>200	—	—	—	—	✓	·54	17	✓	✓	
15	—	—	—	—	·09	500	—	>200	—	—	—	—	✓	·17	16	✓	✓	
16	—	—	—	—	·23	500	—	>200	—	—	—	—	✓	·47	19	✓	✓	

Details of Test Instruments Used (serial and/or asset numbers)

Multifunction: ____ Continuity: BD2132×D Insulation resistance: BD2132×D

Earth fault loop impedance: BB2113×E RCD: BF2164WM Earth electrode resistance: ____

Notes

Where this schedule is issued with an Electrical Installation Condition Report, and incorrect polarity is identified, an X should be entered.

** RCD effectiveness is verified using an alternating current test at rated residual operating current ($I_{\Delta n}$).

The persons responsible for the periodic inspection of the installation should include the relevant items in relation to the electrical installation, the inspection schedule can be reduced or expanded depending on the requirements for the installation.

Possible outcomes:

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

Item No.	Description	Outcome
1.0	INTAKE EQUIPMENT (VISUAL INSPECTION ONLY) An outcome against an item in this section other than access to live parts, should not be used to determine the overall outcome.	
1.1	Distributor supplier intake equipment • Service cable • Service head • Earthing arrangement • Meter tails • Metering equipment • Isolator (where present) NOTE 1: Where inadequacies in the intake equipment are encountered, which may result in a dangerous or potentially dangerous situation, the person ordering the work and/or dutyholder must be informed. It is strongly recommended that the person ordering the work informs the appropriate authority. NOTE 2: For this section only, where inadequacies are found, an 'X' should be put against the appropriate item and the comment made in Section K	√
	Person ordering the work/dutyholder notified (Delete as appropriate)	Y / NA
1.2	Consumer's isolator (where present)	
1.3	Consumer's meter tails	
2.0	PRESENCE OF ADEQUATE ARRANGEMENTS FOR OTHER SOURCES SUCH AS MICRO GENERATORS (551.6; 551.7)	√
3.0	EARTHING / BONDING ARRANGEMENTS (411.3; Chap 54)	N/A
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)	
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	Access ability 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)	√

Item No.	Description	Outcome
4.0	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)	√
4.5	Enclosure not damaged / deteriorated so as to impair safety (651.2)	√
4.6	Presence of a 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, where required (514.12.2)	√
4.11	Presence of alternative supply warning notice at or near consumer unit / distribution board (514.15)	N/A
4.12	Presence of other required labelling (please specify) (Section 514)	N/A
4.13	Compatibility of protective devices, bases and other components; correct type and rating no signs of unacceptable thermal damage, arcing or overheating (411.3.2; 411.4; 411.5; 411.6; Sections 432, 433)	√
4.14	Single-pole switching or protective devices in line conductor only (132.14.1; 530.3.3)	√
4.15	Protection against mechanical damage where cables enter consumer unit / distribution board (522.8.1; 522.8.5; 522.8.11)	√
4.16	Protection against electromagnetic effects where cables enter consumer unit / distribution board / enclosures (521.5.1)	√
4.17	RCD(s) provided for fault protection – includes RCBOs (411.4.204; 411.5.2; 531.2)	√
4.18	RCD(s) provided for additional protection requirements – includes RCBOs (411.3.3; 415.1)	√
4.19	Confirmation of indication that SPD is functional (651.4)	√
4.20	Confirmation that ALL conductor connections, including connections to busbars, are correctly located in terminals and are tight and secure (526.1)	√
4.21	Adequate arrangements where a generating set operates as a switched alternative to the public supply (551.6)	N/A

Item No.	Description	Outcome
4.22	Adequate arrangements where a generating set operates in parallel with the public supply (551.7)	N/A
5.0	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, ducting or trunking (521.10.1) • To include the integrity of conduit and trunking systems (metallic and plastic)	✓
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 systems appropriate for the type and nature of installation and external influences (Section 522)	✓
5.10	Concealed cables installed in prescribed zones (see Section D. Extent and limitations) (522.6.202)	✓
5.11	Cables concealed under floors, above ceilings or in walls / partitions, adequately protected against damage (see Section D. Extent and limitations (522.6.204)	✓
5.12	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 tpermitted (411.3.3) ✓ • for the supply of mobile equipment not exceeding 32 A rating for use outdoors (411.3.3) ✓ • for cables concealed in walls at a depth not exceeding 50 mm (522.6.202; 522.6.203) ✓ • for cables concealed in walls / partitions containing metal parts regardless of depth (522.6.203) ✓ • 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)	✓
	Intentionally left blank	

Item No.	Description	Outcome
5.17	Termination of cables at enclosures - indicate extent of sampling in Section D of the report (Section 526) • Connections soundly made and under no undue strain (526.6) ✓ • No basic insulation of a conductor visible outside enclosure (526.8) ✓ • Connections of live conductors adequately enclosed (526.5) ✓ • 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)	✓
6.0	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)	N/A
6.2	Where used as a protective measure, requirements for SELV or PELV met (701.414.4.5)	N/A
6.3	Shaver supply units complying 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+A2 (701.415.2)	✓
6.5	Low voltage (e.g. 230 V) socket-outlets sited at least 2.5 m from zone 1 (701.512.3)	✓
6.6	Suitability of equipment for external 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)	✓
7.0	OTHER PART 7 SPECIAL INSTALLATIONS OR LOCATIONS	
7.1	List all other specialist installations or locations present, if any. (Record separately the results of particular inspections applied)	N/A
8.0	PROSUMER'S LOW VOLTAGE ELECTRICAL INSTALLATION(S)	
8.1	Where the installation includes additional requirements and recommendations relating to Chapter 82, additional inspection items should be added to the checklist.	N/A

Inspected by

Name (Capitals): HOWARD ROSE

Signature: Howard Rose

Date: 16-11-23