# *Electrical Installation Condition Report*

**Requirements for Electrical Installations - BS 7671:2018**
**(IET Wiring Regulations 18th Edition)**

## Information for recipients:

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).

The person ordering the report should have received the Original©Report and the inspector should have retained a duplicate.

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.

Where the installation incorporates residual current devices (RCDs) there should be a notice at or near the devices stating that they should be tested every 6 months. **For safety reasons it is important that these instructions are followed.**

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 (licencing authority, insurance company, mortgage provider and the like) before the inspection was carried out.

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.

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.

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.

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 on a code C1 or C2 could not, due to the extent or limitations of this inspection, be fully identified. Such observations should be investigated as soon as possible. A further examination of the installation will be necessary, to determine the nature and extent of the apparent deficiency (see Section F).

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 label at or near to the consumer unit/distribution board.

# ELECTRICAL INSTALLATION CONDITION REPORT

FT/EICR 3486000001591

*for Industrial/Commercial Premises*

Requirements for Electrical Installations
BS 7671:2018 (IET Wiring Regulations 18th Edition)

## A. Details of the Installation

| | | | |
|---|---|---|---|
| Client | WESSEX RFCA | Installation | LOSTWITHIEL PLATOON |
| Address | MOUNT HOUSE<br>MOUNT STREET<br>TAUNTON<br>SOMERSET | Address | LOSTWITHIEL ACF CENTRE<br>THE PARADE<br>LOSTWITHIEL<br>CORNWALL |
| Postcode | TA1 3QU | Postcode | PL22 0DX |

## B. Reason for Producing this Report

*This form is to be used only for reporting on the condition of an existing installation.*

SAFETY

Date(s) on which the inspection and testing were carried out 16/08/2022 to 16/08/2022

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

Description of premises Domestic ☐ Commercial ☑ Industrial ☐ Other (please specify)

Estimated age of the wiring system 25 years

Evidence of alterations or addition Yes ☑ No ☐ Not apparent ☐ if 'Yes', estimated ? years

Records of installation available Yes ☐ No ☑ Records held by

Date of last inspection Not Known Electrical Installation Certificate No. or previous Inspection Report No. .

## D. Extent of Electrical Installation Covered by this Report:

AS PER SCHEDULES - DB1 INCLUDING ALL OUTGOING CIRCUITS

**Agreed Limitations and Operational Limitations (Regulations 653.2)**

NO ACCESS TO RANGE, THEREFORE LIMITED INSPECTION AND TESTING CARRIED OUT ON CIRCUITS 1L2, 1L3 & 2L2

Agreed with:

The inspection and testing detailed within this report and accompanying schedule has been carried out in accordance with BS 7671: 2018 (IET Wiring Regulations) amended to 2020

It should be noted that cables concealed within trunkings 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 conditions of the installation (in terms of electrical safety)

UN-SATISFACTORY - C2 & FI DEVIATIONS PRESENT.

Overall assessment of the installation in terms of its suitability for continued use **SATISFACTORY** ☐ ***UNSATISFACTORY** ☑

*An UNSATISFACTORY assessment indicates that dangerous (code C1), or potentially dangerous (code C2), Further investigation (code FI) 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/we recommend that any observations classified as *'Danger present'* **(code C1)** or *'Potential 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 16/08/2027 (date)

## G. Declaration

I/we being the person(s) responsible for the inspection and testing of the electrical installation (as indicated by my/our signatures below), particulars of which are described above, having exercised reasonable skill and care when carrying out the inspection and testing hereby declare that the information in this report, including the observations and the attached schedules, provides an accurate assessment of the condition of the electrical installation taking into account the stated extent and limitations in section D of this report.

| | | | Inspected and tested by | Authorised for issue by |
|---|---|---|---|---|
| Company | Technical Electrical Engineering Ltd t/a Mr Electric | Name: | Ken Whitehead | Steve Creese |
| Address | Wheal Kitty Studios, Wheal Kitty, St Agnes, | Signature: |  |  |
| Postcode | TR5 0RD | | | |
| Branch No. | | Position: | Technician | Qualified Supervisor |
| Scheme No. | 019875 | Date: | 16/08/2022 | 18/08/2022 |

# ELECTRICAL INSTALLATION CONDITION REPORT

*for Industrial/Commercial Premises*

Requirements for Electrical Installations
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FT/EICR 3486000001591

## H. Schedule(s)

2 schedule(s) of inspection and 1 schedule(s) of 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.

## I. Supply Characteristics and Earthing Arrangements

Earthing Arrangements TN-S ☐ TN-C-S ☐ TT ☑ Other ☐ Please specify

Number & Type of live conductors AC ☑ DC ☐ No. of phases 3 No. of wires 4

**Nature of Supply Parameters (Note: (1) by enquiry, (2) by enquiry or by measurement)**

Nominal voltage, $U/U_0$ (1) 400/230 v Nominal frequency, f(1) 50 Hz Confirmation of supply polarity ☑

Prospective fault current, $I_{pf}$ (2) 2.4 kA External loop impedance, $Z_e$ (2) 463 Ω

Supply Protective Device BS (EN) 1361 Fuse HBC 1 Type 1 Rated Current 60 A

No. of Additional Supplies 0

## J. Particulars of Installation Referred to in this Report

**Means of Earthing**

**Details of installation Earth Electrode** (where applicable) Type (e.g. rod(s), tape etc) Rod Distributors facility ☑ Installation Earth Electrode ☑

Location OUTSIDE OFFICE Electrode resistance to earth 463 Ω Maximum Demand (load) 50 Amps ☑ KVA ☐

| | Material | csa | | (✓) or Value | | (✓) or Value | |
|---|---|---|---|---|---|---|---|
| Main Protective Conductors: Earthing Conductor | Copper | 16 | mm² | Continuity Verified ☑ | Ω | Connection Verified ☐ | Ω |
| Protective Bonding Conductor | Copper | 16 | mm² | Continuity Verified ☑ | Ω | Connection Verified ☐ | Ω |

| | Material | csa | | (connection / continuity) | (✓) or Value | | (✓) or Value | |
|---|---|---|---|---|---|---|---|---|
| Main Supply Conductor | Copper | 16 | mm² | Water installation | ☑ | Ω | To structural steel | NA Ω |
| Main Switch Location: MAIN OFFICE | | | mm² | Gas installation pipes | NA | Ω | To lightning protection | NA Ω |
| Fuse/device rating or setting: 100 A Voltage rating 400 V | | | | Oil installation pipes | NA | Ω | Other | ☐ Ω |
| If RCD main switch: Rated residual operating current I Δn 100 mA | | | | | | | | |

BS(EN) 61008 RCD No. of Poles 4 Current Rating 100 A Rated time delay C3 ms Measured operating trip time 47.2 ms

## K. Observations

Referring to the attached schedule of inspection and test results, and subject to the limitations at Section D.

☐ No remedial work required

☑ The following observations are made

**Explanation of codes**

| | |
|---|---|
| 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 |

| Item No. | Observations | Code |
|---|---|---|
| 1 | DB - : 5.2 Cables correctly supported throughout their run (521.10.202; 522.8.5) where visible | L |
| 2 | DB - : 5.10 Concealed cables installed in prescribed zones (see Section D. Extent and limitations) (522.6.202) - Only checked where visible | L |
| 3 | DB - : 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) -Only checked where visible | L |
| 4 | DB - : 5.15 Cables segregated/separated from communications cabling (528.2) Only checked where visible | L |
| 5 | DB - : 5.16 Cables segregated/separated from non-electrical services (528.3) Only checked where visible | L |
| 6 | DB Entire Installation : 2.18 Condition of accessories including socket-outlets, switches and joint boxes (651.2 (v)) - See written report | C2 |
| 7 | 5.14 RCD(s) provided for additional protection / requirements, where required - includes RCBO(s) (411.3.3; 415.1) See written report | C3 |
| 8 | 3.1.2 Presence of installation earth electrode arrangement (542.1.2.3) - Reading too high to be acceptable - see written report | FI |
| 9 | 5.13 RCD(s) provided for fault protection – includes RCBO(s) (411.4.204; 411.5.2; 531.2) - 1 Circuit - see written report | C2 |
| 10 | DB Entire Installation : 1.14 Compatibility of RCD devices - See written report | C3 |

*One of the following codes, as appropriate, has been allocated to each of the observations made above and/or any attached observation sheets 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. | 6, 9 |
| C3 Improvement recommended. | 7, 10 |
| FI Further Investigation required without delay | 8 |

**Outcomes**

| Acceptable condition: | Unacceptable condition: State | Improvement recommended: | Further Investigation: | Not Verified: | Limitation: | Not Applicable: |
|---|---|---|---|---|---|---|
| ✓ | C1 or C2 | C3 | FI | NV | L | N/A |

| Item No. | Description | Outcome |
|---|---|---|
| **1.0 External Condition Of Intake Equipment (Visual Inspection Only) Where inadequacies are encountered, it is recommended that the person ordering the report informs the appropriate authority** | | |
| 1.1 | Service cable | ✓ |
| 1.2 | Service head | ✓ |
| 1.3 | Earthing arrangement | ✓ |
| 1.4 | Meter tails | ✓ |
| 1.5 | Metering equipment | ✓ |
| 1.6 | Isolator (where present) | N/A |
| **2.0 Parallel Or Switched Alternative Sources Of Supply** | | |
| 2.1 | Adequate arrangements where a generating set operates as a switched alternative to the public supply (551.6) | N/A |
| 2.2 | Adequate arrangements where a generating set operates in parallel with the public supply (551.7) | N/A |
| **3.0 Automatic Disconnection Of Supply** | | |
| 3.1 | Main earthing/bonding arrangements (411.3; Chap 54) | ✓ |
| 3.1.1 | Presence of distributor's earthing arrangement (542.1.2.1; 542.1.2.2) | N/A |
| 3.1.2 | Presence of installation earth electrode arrangement (542.1.2.3) | FI |
| 3.1.3 | Adequacy of earthing conductor size (542.3; 543.1.1) | ✓ |
| 3.1.4 | Adequacy of earthing conductor connections (542.3.2) | ✓ |
| 3.1.5 | Accessibility of earthing conductor connections (543.3.2) | ✓ |
| 3.1.6 | Adequacy of main protective bonding conductor sizes (544.1) | ✓ |
| 3.1.7 | Adequacy and location of main protective bonding conductor connections (543.3.2; 544.1.2) | ✓ |
| 3.1.8 | Accessibility of all protective bonding connections (543.3.2) | ✓ |
| 3.1.9 | Provision of earthing/bonding labels at all appropriate locations (514.13) | ✓ |
| 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 |
| 4.2 | Earth-free local equipotential bonding (418.2) | N/A |
| 4.3 | Electrical separation (Section 413; 418.3) | N/A |
| 4.4 | Double insulation (Section 412) | N/A |
| 4.5 | Reinforced insulation (Section 412) | N/A |
| **5.0 Distribution Equipment** | | |
| 5.1 | Adequacy of working space/accessibility to equipment (132.12; 513.1) | ✓ |
| 5.2 | Security of fixing (134.1.1) | ✓ |
| 5.3 | Condition of insulation of live parts (416.1) | ✓ |
| 5.4 | Adequacy/security of barriers (416.2) | N/A |
| 5.5 | Condition of enclosure(s) in terms of IP rating etc (416.2) | ✓ |
| 5.6 | Condition of enclosure(s) in terms of fire rating etc (421.1.6; 421.1.201; 526.5) | ✓ |
| 5.7 | Enclosure not damaged/deteriorated so as to impair safety (651.2) | ✓ |
| 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) | ✓ |
| 5.10 | Operation of main switch(es) (functional check) (643.10) | ✓ |
| 5.11 | Manual operation of circuit-breakers and RCD(s) to prove disconnection (643.10) | ✓ |
| 5.12 | Confirmation that integral test button/switch causes RCD(s) to trip when operated (functional check) (643.10) | ✓ |
| 5.13 | RCD(s) provided for fault protection – includes RCBO(s) (411.4.204; 411.5.2; 531.2) | C2 |
| 5.14 | RCD(s) provided for additional protection / requirements, where required - includes RCBO(s) (411.3.3; 415.1) | C3 |
| 5.15 | Presence of RCD six-monthly test notice at or near equipment, where required (514.12.2) | ✓ |
| 5.16 | Presence of diagrams, charts or schedules at or near equipment, where required (514.9.1) | ✓ |
| 5.17 | Presence of non-standard (mixed) cable colour warning notice at or near equipment, where required (514.14) | ✓ |
| 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) | ✓ |
| 5.20 | Presence of other required labelling (please specify) (Section 514) | ✓ |
| 5.21 | Compatibility of protective device, base and other components; correct type and rating (no signs of unacceptable thermal damage, arcing or overheating) (411.3.2; 411.4; 411.4.5; 411.4.6; Sections 432; 433) | ✓ |
| 5.22 | Single-pole switching or protective devices in line conductors only (132.14.1; 530.3.3) | ✓ |
| 5.23 | Protection against mechanical damage where cables enter equipment (522.8.1; 522.8.5; 522.8.11) | ✓ |
| 5.24 | Protection against electromagnetic effects where cables enter ferromagnetic enclosures (521.5.1) | ✓ |
| **6.0 Distribution Circuits** | | |

| | | |
|---|---|---|
| 6.1 | Identification of conductors (514.3.1) | ✓ |
| 6.2 | Cables correctly supported throughout their run (521.10.202; 522.8.5) | ✓ |
| 6.3 | Condition of insulation of live parts (416.1) | ✓ |
| 6.4 | Non-sheathed cables protected by enclosure in conduit, ducting or trunking. Integrity of containment (521.10.1) | ✓ |
| 6.5 | Suitability of containment systems for continued use (including flexible conduit) (Section 522) | ✓ |
| 6.6 | Cables correctly terminated in enclosures (Section 526) | ✓ |
| 6.7 | Confirmation that ALL conductor connections, including connections to busbars, are correctly located in terminals and are tight and secure (526.1) | ✓ |
| 6.8 | Examination of cables for signs of unacceptable thermal or mechanical damage/deterioration (421.1; 522.6) | ✓ |
| 6.9 | Adequacy of cables for current-carrying capacity with regard for the type and nature of installation (Section 523) | ✓ |
| 6.10 | Adequacy of protective devices: type and rated current for fault protection (411.3) | ✓ |
| 6.11 | Presence and adequacy of circuit protective conductors (411.3.1.1; 543.1) | ✓ |
| 6.12 | Coordination between conductors and overload protective devices (433.1; 533.2.1) | ✓ |
| 6.13 | Cable installation methods/practices with regard to the type and nature of installation and external influences (Section 522) | ✓ |
| 6.14 | Where exposed to direct sunlight, cable of a suitable type (522.11.1) | ✓ |
| **6.15** | **Cables concealed under floors, above ceilings, in walls/partitions less than 50 mm from a surface, and in partitions containing metal parts** | |
| 6.15.1 | Installed in prescribed zones (see Section D. Extent and limitations) (522.6.202) or | NV |
| 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 D. Extent and limitations) (522.6.204) | NV |
| 6.16 | Provision of fire barriers, sealing arrangements and protection against thermal effects (Section 527) | ✓ |
| 6.17 | Band II cables segregated/separated from Band I cables (528.1) | NV |
| 6.18 | Cables segregated/separated from non-electrical services (528.3) | NV |
| 6.19 | Condition of circuit accessories (651.2) | ✓ |
| 6.20 | Suitability of circuit accessories for external influences (512.2) | ✓ |
| 6.21 | Single-pole switching or protective devices in line conductors only (132.14.1; 530.3.3) | ✓ |
| 6.22 | Adequacy of connections, including cpc's, within accessories and to fixed and stationary equipment – identify/record numbers and locations of items inspected (Section 526) | ✓ |
| 6.23 | Presence, operation and correct location of appropriate devices for isolation and switching (Chapter 46; 537) | ✓ |
| 6.24 | General condition of wiring systems (651.2) | ✓ |
| 6.25 | Temperature rating of cable insulation (522.1.1; Table 52.1) | ✓ |

Inspector's Name: Ken Whitehead

Signature:

Date: 16/08/2022

# ELECTRICAL INSTALLATION CONDITION REPORT - Schedule of Tests

*for Industrial/Commercial Premises*

FT/EICR 3486000001591

**Requirements for Electrical Installations**
**BS 7671:2018 (IET Wiring Regulations 18th Edition)**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Company Name** | Technical Electrical Engineering Ltd t/a Mr Electric | **Company Address** | Wheal Kitty Studios | **Postcode** | TR5 0RD | **Branch No.** | **Scheme No.** 019875 |
| **Client** | WESSEX RFCA | **Installation Address** | LOSTWITHIEL PLATOON, LOSTWITHIEL ACF CENTRE, THE PARADE, LOSTWITHIEL, CORNWALL | **Postcode** | PL22 0DX | | |

**Distribution board details - Complete in every case**

Location: MAIN OFFICE
Designation: DB 1
Num. of ways: 6 Num. of phases: 3
Supply polarity confirmed: ☑ Phase sequence confirmed: ☐

**Complete only if the distribution board is not connected directly to the origin of the installation**

Supply to distribution board is from:
Overcurrent protective device for the distribution circuit: BS(EN) NA Type NA Rating NA A Voltage NA V

**Characteristics at this distribution board**

Associated RCD(if any): BS (EN) 61008
$Z_d$ 95 Ω No. of poles 4
$I_{pf}$ 2.4 kA IΔn 100
Time delay (if applicable) C3
Above 30mA (if applicable): Operating at 1 IΔn 47.2 ms
30mA or below: Operating at 5 IΔn N/A ms

**Test instrument serial number(s)**

Loop impedance 1008128101650691
Insulation resistance 1008128101650691
Continuity 1008128101650691
RCD 1008128101650691

## CIRCUIT DETAILS / TEST RESULTS

| Circuit No. and Line No. | Circuit designation (Distribution board Designation: DB 1) | Type of wiring | Ref. method | No. of points | Circuit conductors csa (mm²) L / N | Circuit conductors csa (mm²) CPC | Maximum disconnection | Overcurrent protective devices: BS EN Number | Type No. | Rating (A) | Breaking capacity (KA) | RCD operating (mA) | BS 7671 Max. permitted Zs Other 100% (Ω) | Circuit impedance Ω: Ring final circuits only (measured end-to-end) r1 | rn | r2 | Fig 8 check (✓) | All circuits to be completed using R1R2 or R2, not both: R1 + R2 | R2 | Insulation resistance (Record lower reading): Test voltage V | L/L, L/N M(Ω) | L/E, N/E M(Ω) | Polarity (✓) | Max. Measured Zs (Ω) | RCD testing: Above 30mA IΔn ms | 30mA or below 5 IΔn ms | Manual test button operation: RCD (✓) | AFDD (✓) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/L1 | .LIGHTS MAIN HALL | A | A | 11 | 1 | 1 | 0.2 | 61009 RCD/ | B | 6 | 10 | 30 | 7.28 | N/A | N/A | N/A | N/A | 0.49 | N/A | 250 | LIM | 100 | ✓ | 96 | 28.8 | 14.8 | ✓ | N/A |
| 1/L2 | SOCKET CLASSROOM & RANGE | A | A | 4 | 2.5 | 1.5 | 0.2 | 61009 RCD/RCBO | B | 32 | 10 | 30 | 1.37 | 0.66 | 0.66 | 1.11 | N/A | 0.45 | N/A | 250 | LIM | 100 | ✓ | 99 | 18 | 14.1 | ✓ | N/A |
| 1/L3 | HEATERS CLASSROOM & RANGE | A | A | 2 | 2.5 | 1.5 | 0.2 | 61009 RCD/RCBO | B | 32 | 10 | 30 | 1.37 | 0.63 | 0.64 | 1.07 | N/A | 0.43 | N/A | 250 | LIM | 100 | ✓ | 99 | 18 | 14.1 | ✓ | N/A |
| 2/L1 | .LIGHTS MAIN HALL | A | A | 10 | 1 | 1 | 0.2 | 61009 RCD/ | B | 6 | 10 | 30 | 7.28 | N/A | N/A | N/A | N/A | 0.51 | N/A | 250 | LIM | 100 | ✓ | 99 | 28.8 | 14.8 | ✓ | N/A |
| 2/L2 | .LIGHTS CLASSROOM & RANGE | A | A | 8 | 1 | 1 | 0.2 | 61009 RCD/RCBO | B | 6 | 10 | 30 | 7.28 | N/A | N/A | N/A | N/A | 0.87 | N/A | 250 | LIM | 100 | ✓ | 96 | 29.2 | 14.5 | ✓ | N/A |
| 2/L3 | .LIGHTS CANTEEN & STORE | A | A | 4 | 1 | 1 | 0.2 | 60898 MCB | B | 6 | 10 | N/A | 7.28 | N/A | N/A | N/A | N/A | 1.04 | N/A | 250 | LIM | 100 | ✓ | 96 | N/A | N/A | N/A | N/A |
| 3/L1 | .FIRE ALARM | A | A | 1 | 2.5 | 1.5 | 0.2 | 60898 MCB | B | 20 | 10 | N/A | 2.19 | N/A | N/A | N/A | N/A | 0.78 | N/A | 250 | LIM | 100 | ✓ | 97 | N/A | N/A | N/A | N/A |
| 3/L2 | SPARE | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 3/L3 | SOCKET & HEATER UNDER DB | A | A | 2 | 2.5 | 1.5 | 0.2 | 61009 RCD/RCBO | B | 32 | 10 | 30 | 1.37 | 0.07 | 0.07 | 0.12 | N/A | 0.05 | N/A | 250 | LIM | 100 | ✓ | 93 | 18.9 | 14.1 | ✓ | N/A |
| 4/L1 | .LIGHTS LOBBY & ENTRANCE | A | A | 2 | 1 | 1 | 0.2 | 60898 MCB | B | 6 | 10 | N/A | 7.28 | N/A | N/A | N/A | N/A | 0.46 | N/A | 250 | LIM | 100 | ✓ | 94 | N/A | N/A | N/A | N/A |
| 4/L2 | SPARE | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 4/L3 | HEATERS | A | A | 2 | 2.5 | 1.5 | 0.2 | 60898 MCB | B | 20 | 10 | N/A | 2.19 | N/A | N/A | N/A | N/A | 0.14 | N/A | 250 | LIM | 100 | ✓ | 97 | N/A | N/A | N/A | N/A |
| 5/L1 | OFFICE HEATER & SOCKETS | A | A | 7 | 2.5 | 1.5 | 0.2 | 60898 MCB | B | 20 | 10 | N/A | 2.19 | N/A | N/A | N/A | N/A | 0.34 | N/A | 250 | LIM | 100 | ✓ | 98 | N/A | N/A | N/A | N/A |
| 5/L2 | DRILL HALL HEATERS | A | A | 2 | 2.5 | 1.5 | 0.2 | 60898 MCB | B | 32 | 10 | N/A | 1.37 | 0.48 | 0.48 | 0.82 | N/A | 0.32 | N/A | 250 | LIM | 100 | ✓ | 97 | N/A | N/A | N/A | N/A |
| 5/L3 | KITCHEN HEATER/SERVERS | A | A | 4 | 2.5 | 1.5 | 0.2 | 61009 RCD/RCBO | B | 32 | 10 | 30 | 1.37 | 0.39 | 0.38 | 0.65 | N/A | 0.26 | N/A | 250 | LIM | 100 | ✓ | 96 | 18.9 | 13.7 | ✓ | N/A |

Details of circuits and/or installed equipment vulnerable to damage when testing: ANY ELECTRONIC DEVICES.

Date(s) dead testing: 16/08/2022 To: 16/08/2022
Date(s) live testing: 16/08/2022 To: 16/08/2022

Tested by: Name (capital letters): KEN WHITEHEAD Position: Technician Date: 16/08/2022

Signature:

Wiring Types. **A** PVC/PVC, **B** PVC cables in metallic Conduit, **C** PVC cables in non-metallic Conduit, **D** PVC cables in metallic trunking, **E** PVC cables in non-metallic trunking, **F** PVC/SWA cables, **G** SWA/XPLE cables, **H** Mineral Insulated, **MW** Metal Work, **FM** Ferrous Metal, **O** Other

# ELECTRICAL INSTALLATION CONDITION REPORT - Schedule of Tests

*for Industrial/Commercial Premises*

FT/EICR 3486000001591

**Requirements for Electrical Installations**
**BS 7671:2018 (IET Wiring Regulations 18th Edition)**

## CIRCUIT DETAILS / TEST RESULTS

| Circuit No. and Line No. | Distribution board Designation: DB 1 / Circuit designation | Type of wiring | Ref. method | No. of points | Circuit conductors csa (mm²) L / N | Circuit conductors csa (mm²) CPC | Maximum disconnection | Overcurrent protective devices: BS EN Number | Type No. | Rating (A) | Breaking capacity (KA) | RCD operating (mA) | BS 7671 Max. permitted Zs Other 100% (Ω) | Circuit impedance Ω: Ring final circuits only (measured end-to-end) r1 | rn | r2 | Fig 8 check (✓) | All circuits to be completed using R1R2 or R2, not both: R1 + R2 | R2 | Insulation resistance (Record lower reading): Test voltage V | L/L, L/N M(Ω) | L/E, N/E M(Ω) | Polarity (✓) | Max. Measured Zs (Ω) | RCD testing: Above 30mA IΔn ms | 30mA or below 5 IΔn ms | Manual test button operation: RCD (✓) | AFDD (✓) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/L1 | SOCKETS DRILL HALL & TOILET HEATERS | A | A | 9 | 2.5 | 1.5 | 0.2 | 61009 RCD/RCBO | B | 32 | 10 | 30 | 1.37 | 0.72 | 0.72 | 1.23 | N/A | 0.49 | N/A | 250 | LIM | 100 | ✓ | 96 | 18.6 | 14.1 | ✓ | N/A |
| 6/L2 | SOCKETS DRILL HALL ROOM & HEATER | A | A | 3 | 2.5 | 1.5 | 0.2 | 61009 RCD/RCBO | B | 32 | 10 | 30 | 1.37 | 0.41 | 0.41 | 0.69 | N/A | 0.28 | N/A | 250 | LIM | 100 | ✓ | 97 | 18.6 | 13.9 | ✓ | N/A |
| 6/L3 | .WATER HEATER | A | A | 1 | 2.5 | 1.5 | 0.2 | 61009 RCD/ | B | 16 | 10 | 30 | 2.73 | N/A | N/A | N/A | N/A | 0.27 | N/A | 250 | LIM | 100 | ✓ | 98 | 18.4 | 14.2 | ✓ | N/A |

Details of circuits and/or installed equipment vulnerable to damage when testing: ANY ELECTRONIC DEVICES.

Date(s) dead testing: 16/08/2022 To 16/08/2022

Date(s) live testing: 16/08/2022 To 16/08/2022

Tested by: Name (capital letters): KEN WHITEHEAD Position: Technician Date: 16/08/2022

Signature:

Wiring Types. **A** PVC/PVC, **B** PVC cables in metallic Conduit, **C** PVC cables in non-metallic Conduit, **D** PVC cables in metallic trunking, **E** PVC cables in non-metallic trunking, **F** PVC/SWA cables, **G** SWA/XPLE cables, **H** Mineral Insulated, **MW** Metal Work, **FM** Ferrous Metal, **O** Other

**Outcomes**

| Acceptable condition: | Unacceptable condition: State | Improvement recommended: | Further Investigation: | Not Verified: | Limitation: | Not Applicable: |
|---|---|---|---|---|---|---|
| ✓ | C1 or C2 | C3 | FI | NV | L | N/A |

In the outcome column use the codes above. Provide additional comment where appropriate. C1/C2/C3 and FI coded items to be recorded in section K of the condition report.

| DB/CU Ref: | Entire Installation | DB/CU Location: | N/A |
|---|---|---|---|

| Item No. | Description | Outcome |
|---|---|---|
| **1.0 CONSUMER UNIT/DISTRIBUTION BOARD(S)** | | |
| 1.1 | Adequacy of working space/accessibility to consumer unit/distribution board (132.12; 513.1) | ✓ |
| 1.2 | Security of fixing (134.1.1) | ✓ |
| 1.3 | Condition of enclosure(s) in terms of IP rating (Barriers etc) (416.2) | ✓ |
| 1.4 | Condition of enclosure(s) in terms of fire rating etc (421.1.6; 421.1.201; 526.5) | ✓ |
| 1.5 | Enclosure/obstacles not damaged/deteriorated so as to impair safety (651.2) | ✓ |
| 1.5.1 | Presence and effectiveness of obstacles (417.2) | N/A |
| 1.6 | Presence of main linked switch (as required by 462.1.201) | ✓ |
| 1.7 | Operation of main switch (functional check) (643.10) | ✓ |
| 1.8 | Manual operation of circuit-breakers and RCD(s) (test button) to prove disconnection (643.10) | ✓ |
| 1.9 | Correct identification of circuit details and protective devices (514.8.1; 514.9.1) | ✓ |
| 1.10 | Presence of RCD six-monthly test notice at or near consumer unit/distribution board (514.12.2) | ✓ |
| 1.11 | Presence of non-standard (mixed) cable colour warning notice at or near equipment, where required (514.14) | ✓ |
| 1.12 | Presence of alternative supply warning notice at or consumer unit/distribution board (514.15) | ✓ |
| 1.13 | Presence of other required labelling (Please specify) (Section 514) | ✓ |
| 1.14 | Compatibility of protective devices, bases and other components; correct type and rating (no signs of unacceptable thermal damage, arcing or overheating) (411.3.2; 411.4; 411.5; 411.6; Sections 432; 433) | C3 |
| 1.15 | Single-pole switching or protective devices in line conductors only (132.14.1, 530.3.3) | ✓ |
| 1.16 | Protection against mechanical damage where cables enter consumer unit/distribution board (132.14.1; 522.8.1; 522.8.5; 522.8.11) | ✓ |
| 1.17 | Protection against electromagnetic effects where cables enter ferromagnetic enclosures (521.5.1) | ✓ |
| 1.18 | RCD(s) provided for fault protection - includes RCBO(s)(411.4.204; 411.5.2; 531.2) | ✓ |
| 1.19 | RCD(s) provided for additional protection/requirements, where required - includes RCBO(s) (411.3.3; 415.1) | ✓ |
| 1.20 | Confirmation of indication that SPD is functional (651.4) | N/A |
| 1.21 | Confirmation that ALL conductor connections, including connections to the busbars are correctly located in terminals and are tight and secure (526.1) | ✓ |
| 1.22 | Adequate arrangements where a generating set operates as a switched alternative to the public supply (551.6) | N/A |
| 1.23 | Adequate arrangements where a generating set operates in parallel with the public supply (551.7) | N/A |
| **2.0 FINAL CIRCUITS** | | |
| 2.1 | Identification of conductors (514.3.1) | ✓ |
| 2.2 | Cables correctly supported throughout their run (521.10.202; 522.8.5) | ✓ |
| 2.3 | Condition of insulation of live parts (416.1) | ✓ |
| 2.4 | Non-sheathed cables protected by enclosure in conduit, ducting or trunking. (521.10.1) | ✓ |
| 2.4.1 | To include the integrity of conduit and trunking systems (metallic and plastic) | ✓ |
| 2.5 | Adequacy of cables for current-carrying capacity with regard for the type and nature of installation (Section 523) | ✓ |
| 2.6 | Coordination between conductors and overload protective devices (433.1; 533.2.1) | ✓ |
| 2.7 | Adequacy of protective devices: type and rated current for fault protection (411.3) | ✓ |
| 2.8 | Presence and adequacy of circuit protective conductors (411.3.1; Section 543) | ✓ |
| 2.9 | Wiring system(s) appropriate for the type and nature of the installation and external influences (Section 522) | ✓ |
| 2.10 | Connected cables installed in prescribed zones (see Section D. Extent and limitations) (522.6.202) | ✓ |
| 2.11 | Cables concealed under floors, above ceilings or in walls/partitions, adequately protected against damage (522.6.204) | ✓ |
| **2.12** | **Provision of additional requirements for protection by RCD not exceeding 30 mA:** | |
| 2.12.1 | For all socket-outlets of rating 32 A or less unless exempt (4.11.3.3) | ✓ |
| 2.12.2 | For the supply of Mobile equipment not exceeding 32 A rating for use outdoors (411.3.3) | ✓ |
| 2.12.3 | For cables concealed in walls at a depth of less than 50 mm (522.6.202; 522.6.203) | ✓ |
| 2.12.4 | For cables concealed in walls/partitions containing metal parts regardless of depth (522.6.203) | ✓ |
| 2.12.5 | For circuits supplying luminaires within domestic (household) premises (411.3.4) | ✓ |
| 2.13 | Provision of fire barriers, sealing arrangements and protection against thermal effects (Section 527) | ✓ |
| 2.14 | Band II cables segregated/separated from Band I cables (528.1) | ✓ |
| 2.15 | Cables segregated/separated from communications cabling (528.2) | ✓ |
| 2.16 | Cables segregated/separated from non-electrical services (528.3) | ✓ |
| **2.17** | **Termination of cables at enclosures - indicate extent of sampling in section d of the report (section 526)** | |
| 2.17.1 | Connections soundly made and under no undue strain (526.6) | ✓ |

| | | |
|---|---|---|
| 2.17.2 | No basic insulation of a conductor visible outside enclosure (526.8) | ✓ |
| 2.17.3 | Connections of live conductors adequately enclosed (526.5) | ✓ |
| 2.17.4 | Adequately connected at point of entry to enclosure (glands, bushes etc.) (522.8.5) | ✓ |
| 2.18 | Condition of accessories including socket-outlets, switches and joint boxes (651.2 (v)) | ✓ |
| 2.19 | Suitability of accessories for external influences (512.2) | ✓ |
| 2.20 | Adequacy or working space/accessibility to equipment (132.12; 513.1) | ✓ |
| 2.21 | Single-pole switching or protective devices in line conductors only (132.14.1; 530.3.3) | ✓ |
| **3.0 ISOLATION AND SWITCHING** | | |
| **3.1** | **Isolators (Section 460; 537)** | |
| 3.1.1 | Presence and condition of appropriate devices (462; 537.2.7) | N/A |
| 3.1.2 | Acceptable location - state if local or remote from equipment in question (462; 537.2.7) | N/A |
| 3.1.3 | Capable of being secured in the OFF position (462.3) | N/A |
| 3.1.4 | Correct operation verified (643.10) | N/A |
| 3.1.5 | Clearly identified by position and/or durable marking (537.2.6) | N/A |
| 3.1.6 | 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 |
| **3.2** | **Switching off for mechanical maintenance (Section 464; 537.3.2)** | |
| 3.2.1 | Presence and condition of appropriate devices (464.1; 527.3.2) | N/A |
| 3.2.2 | Acceptable location - state if local or remote from equipment in question (537.3.2.4) | N/A |
| 3.2.3 | Capable of being secured in the OFF position (462.3) | N/A |
| 3.2.4 | Correct operation verified (643.10) | N/A |
| 3.2.5 | Clearly identified by position and/or durable marking (537.3.2.4) | N/A |
| **3.3** | **Emergency switching/stopping (465; 537.3.3)** | |
| 3.3.1 | Presence and condition of appropriate devices (Section 465; 537.3.3; 537.4) | N/A |
| 3.3.2 | Readily accessible for operation where danger might occur (537.3.3.6) | N/A |
| 3.3.3 | Correct operation verified (643.10) | N/A |
| 3.3.4 | Clearly identified by position and/or durable marking (537.3.3.6) | N/A |
| **3.4** | **Functional switching (section 463; 537.3.1)** | |
| 3.4.1 | Presence and condition of appropriate devices (537.3.1.1; 537.3.1.2) | N/A |
| 3.4.2 | Correct operation verified (537.3.1.1; 537.3.1.2) | N/A |
| **4.0 CURRENT-USING EQUIPMENT (PERMANENTLY CONNECTED)** | | |
| 4.1 | Condition of equipment in terms of IP rating etc (416.2) | ✓ |
| 4.2 | Equipment does not constitute a fire hazard (Section 421) | ✓ |
| 4.3 | Enclosure not damaged/deteriorated so as to impair safety (134.1.1; 416.2; 512.2) | ✓ |
| 4.4 | Suitability for the environment and external influences (512.2) | ✓ |
| 4.5 | Security of fixing (134.1.1) | ✓ |
| 4.6 | 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) | ✓ |
| **4.7** | **Recessed luminaires (downlighters)** | |
| 4.7.1 | Correct type of lamps fitted (559.3.1) | ✓ |
| 4.7.2 | Installed to minimize build-up of heat by use of "fire rated" fittings, insulation displacement box or similar (421.1.2) | ✓ |
| 4.7.3 | No signs of overheating to surrounding building fabric (559.4.1) | ✓ |
| 4.7.4 | No signs of overheating to conductors/terminations (526.1) | ✓ |
| **5.0 PART 7 SPECIAL INSTALLATIONS OR LOCATIONS** | | |
| 7.01 | If any special installations or locations are present, list the particular inspections applied. | ✓ |

## 8.0 Schedule of Tests

Results to be recorded on Schedule of Test Results

| | | | | | |
|---|---|---|---|---|---|
| 8.1 | External earth loop impedance, $Z_e$ | Yes | 8.9 | Insulation Resistance between Live Conductors | Yes |
| 8.2 | Installation earth electrode | N/A | 8.10 | Insulation Resistance between Live Conductors & Earth | Yes |
| 8.3 | Prospective fault current, $I_{pf}$ | Yes | 8.11 | Polarity (prior to energisation) | Yes |
| 8.4 | Continuity of Earth Conductors | Yes | 8.12 | Polarity (after energisation) including phase sequence | Yes |
| 8.5 | Continuity of Circuit Protective Conductors | Yes | 8.13 | Earth Fault Loop Impedance | Yes |
| 8.6 | Continuity of ring final circuit | Yes | 8.14 | RCDs/RCBOs including selectivity | Yes |
| 8.7 | Continuity of Protective Bonding Conductors | Yes | 8.15 | Functional testing of RCD devices | Yes |
| 8.8 | Volt drop verified | N/A | 8.16 | Functional testing of AFDD(s) devices | N/A |

Inspector's Name: Ken Whitehead

Signature:

Date: 16/08/2022

## Generic Continuation