PERIODIC INSPECTION REPORT FOR AN ELECTRICAL INSTALLATION

BS 7671 2001 (as amended) REQUIREMENTS FOR ELECTRICAL INSTALLATIONS

FLUKE

REPORT 02.

CLIENT DETAILS

Client: J. MORRIS

Address: AZLIN COURT

Purpose for which this report is required:

DETAILS OF THE INSTALLATION

Occupier:

Installation address: AZLON CLOSE, SWINDON.

DESCRIPTION OF PREMISES

Domestic ☑ Commercial ☐ Industrial ☐ Other ☐

Estimated age of the electrical installation: 20 years

Evidence of alterations or additions: Yes ☑ No ☐ Not apparent ☐

If "Yes", estimate age and give details: 10/15 YEARS

Date of last inspection: NONE Records available: Yes ☐ No ☑

EXTENT AND LIMITATIONS OF THE INSPECTION AND TESTING

Extent of electrical installation covered by this report: SOCKETS IN STREET BOXES ONLY.

Limitations agreed with client: AS ABOVE

This inspection has been carried out in accordance with BS 7671: 2001 (IEE Wiring Regulations), amended to 2008 Cables concealed within trunking and conduits, or cables and conduits concealed under floors, in roof spaces and generally within the fabric of the building or underground have not been inspected.

NEXT INSPECTION

I/~~We~~* recommend that this installation is further inspected after an interval of not more than ..... months/years* provided that any observations 'requiring urgent attention are attended to without delay.

DECLARATION

Inspected and tested by

Name: M BEVAN Signature:

For and on behalf of: M BEVAN ELECTRICAL CONTRACTING Position: OWNER.

Address: 28 FAIRWAY CALNE WILTS Date: 6/6/09

NOTES FOR RECIPIENT

This Periodic Inspection Report is intended to document the condition of an existing installation.

The recipient should recieve the original report and a duplicate should be retained by the contractor. In the event that you are the person ordering or acting on behalf of the owner, this report or a copy of it should be passed to the owner immediately. The original report should be kept in a safe place and should be shown to any person carrying out work on or inspecting this installation in the future.

The extent and limitations part of this report should fully identify the extent of the installation covered by this report and should clearly show any limitations on the inspection and tests. The contractor should have agreed these aspects with the client and any other interested parties (licensing authority, insurance company, building society, etc.) before the inspection was carried out.

This report will contain a list of any recommended actions necessary to bring the installation up to current standards.

For items on page 2 stating 'requiring urgent attention', the safety of those using the installation may be at risk and it is recommended that the necessary remedial work is carried out by a competent person without delay.

For safety reasons this electrical installation needs to be re-inspected by a competent person at appropriate intervals. The maximum time interval recommended before the next inspection is stated in the report under Next Inspection.

If at a later date the property is vacated this report will provide any new owner with details of the condition of the electrical installation at the time that this report was issued.

PERIODIC INSPECTION REPORT FOR AN ELECTRI...

FLUKE.

✔ tick box where applicable

REPORT

SUPPLY CHARACTERISTICS AND EARTHING AR...

Number of Live Conductors: (2) / 3 / 4*	Type of live conductors: (a.c) / d.c.*		
Nature of Supply	Nominal voltage: 230 V	Nominal frequency (f): 50 Hz	
	Fault current (earth fault/short-circuit)*: 1.74 kA	External loop impedance (Z_e): 0.12 Ω	
Supply Protective Device Characteristics:	BS (EN): 1361	Nominal current rating (I_n): 100 A	
Earthing Arrangements:	TN-S ☐	TN-C-S ☑	TT ☐ TN-C ☐ IT ☐

PARTICULARS OF INSTALLATION REFERRED TO IN ...

✔ tick box where applicable

Means of Earthing: Supplier's facility ☑ Installation earth electrode ☐ Maximum demand (load): ..... Amps per phase

Details of Installation Earth El...

Location: NA Type: (rods, etc.) NA

Electrode Resistance to Earth (R_A): NA Ω Method of Measurement: NA

Main Protective Conductors

✔ tick box where applicable

Earthing Conductor:	Material: COPPER	c.s.a: 25 mm²	Connection(s) verified: ☑
Main Equipotential Bonding Conductors:	Material: COPPER	c.s.a: 16 mm²	Connection(s) verified: ☑

To: Water Service ☐ Gas Installation Pipe ☐ Other ~~state~~ (e.g. structure): NONE

Main Switch or Circuit-b...

BS (EN) 5419 No. of poles: 2 Current rating: 100 A Voltage rating: 400 V

Rated residual operating current $I_{\Delta n}$: NA mA Operating time at $I_{\Delta n}$: NA ms

OBSERVATIONS AND RECOMME...

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 work is required ☐ The following observations are made ☑

WIRING WITH DISTRIBUTION BOX NEEDS TIDYING AND REDUNDAT. REMOVING (CODE 2)

One of the following numbers, as appropriate, is to be allocated to each of the observations made above to indicate to the person(s) responsible for the installation the action recommended.

1] Requires urgent attention 2] Requires improvement 3] Requires further investigation

4] Does not comply with BS 7671: 2001 amended to ..... This does not imply that the electrical installation inspected is unsafe

SUMMARY OF THE INSPE...

Date(s) of the inspection: 6/6/09

General condition of the installation:

Overall assessment: Satisfactory ☑ Unsatisfactory ☐

SCHEDULE(S)

THE ATTACHED SCHEDULES ARE PART OF THIS DOCUMENT AND THIS REPORT IS VALID ONLY WHEN THEY ARE ATTACHED TO IT.

No. of Schedules of Inspections attached: 1 No. of Schedules of Test Results attached: 1

* Delete as appropriate

SCHEDULE OF INSPECTIONS

FLUKE.

CERT./REPORT SCHEDULE 02

Method of Protection against electric shock

(a) Protection against both direct and indirect contact

NA	(i)	SELV
NA	(ii)	Limitation of discharge of energy

(b) Protection against direct contact

✓	(i)	Insulation of live parts
✓	(ii)	Barriers or enclosures
NA	(iii)	Obstacles
NA	(iv)	Placing out of reach
NA	(v)	PELV
✓	(vi)	Presence of RCD for supplementary protection

(c) Protection against indirect contact

(i) EEBAD including:

✓	Presence of earthing conductor
✓	Presence of circuit protective conductor(s)
NA	Presence of main equipotential bonding conductor(s)
NA	Presence of supplementary equipotential bonding conductors
NA	Presence of earthing arrangements for combined protective and functional purposes
NA	Presence of adequate arrangements for alternative source(s), where applicable
✓	Presence of residual current device(s)

NA	(ii)	Use of Class II equipment or equivalent insulation
NA	(iii)	Non-conducting location: Absence of protective conductors
NA	(iv)	Earth-free equipotential bonding: Presence of earth-free equipotential bonding conductors
NA	(v)	Electrical separation

Prevention of mutual detrimental influence

NA	(a)	Proximity of non-electrical services and other influences
NA	(b)	Segregation of Band I and band II circuits or Band II insulation used
NA	(c)	Segregation of safety circuits

Identification

NA	(a)	Presence of diagrams, instructions, circuit charts and similar information
✓	(b)	Presence of danger notices and other warning notices
✓	(c)	Labelling of protective devices, switches and terminals
✓	(d)	Identification of conductors

Cables and conductors

NA	(a)	Routing of cables in prescribed zones or within mechanical protection
✓	(b)	Connection of conductors
LIM	(c)	Erection methods
✓	(d)	Selection of conductors for current-carrying capacity and voltage drop
NA	(e)	Presence of fire barriers, suitable seals and protection against thermal effects

General

✓	(a)	Presence and correct location of appropriate devices for isolation and switching
✓	(b)	Adequacy of access to switchgear and other equipment
NA	(c)	Particular protective measures for special installations and locations
✓	(d)	Connection of single-pole devices for protection or switching in phase conductors only
✓	(e)	Correct connection of accessories and equipment
NA	(f)	Presence of undervoltage protective devices
✓	(g)	Choice and setting of protective and monitoring devices for protection against indirect contact and/or overcurrent
✓	(h)	Selection of equipment and protective measures appropriate to external influences
✓	(i)	Selection of appropriate functional switching devices

✓ To indicate an inspection has been carried out and the result is satisfactory.

N/A To indicate an inspection is not applicable.

In addition to the above, the following notations may also be used when reporting on existing installations:

X To indicate an inspection has been carried out and the result is unsatisfactory.

Lim Indicates that, exceptionally, a limitation agreed with the [illegible] ordering the work prevented the inspection being carried [illegible]

Inspected by (Print and Sign:)

M BEVAN

Date:

6/6/09

DETAILS AT DISTRIBUTION BOARD (DB)/CONSUMER UNIT (CU)

CERT./REPORT SCHEDULE 02

FLUKE

Location: ARLON CLOSE. Date: 6/6/09

Designation:

Inspected and tested by: (Print and sign) MBEVAN

System Characteristics

System Type:

TN-C-S ☑ TN-S ☐ TT ☐

(Tick relevant box(es))

Fault Level(s):

1 ϕ 1.74 kA

3 ϕ N/A kA

Measured impedance at dis. board/consumer unit Z_e/Z_s*: 0.12 Ω

Main Switch

Make: MERLIN BS (EN): 5419

Voltage Rating: 250 V Current Rating (I_n): 100 A

(If) RCD: NA mA Operation time (at $I_{\Delta n}$): NA ms

DB/CU supplied from: NA

Equipment vulnerable to testing: N/A

Comments: CABLING / DUCT ETC INSTALLED BY OTHERS.

Supply Protective Device

BS (EN): ~~N/A~~ 1361 Current Rating (I_n): ~~N/A~~ 100 A (If) RCD: $I_{\Delta n}$: N/A mA Operating time at $I_{\Delta n}$: N/A ms

CIRCUIT DETAILS AND TEST RESULTS

~~Number~~ of way	Circuit description	Type of wiring (e.g. PVC/PVC)	Number of points served	Circuit conductors (mm²) Live	Circuit conductors (mm²) cpc	Max disconnection time (s) permitted by BS 7671	Overcurrent protective devices BS (EN)	Overcurrent protective devices Type	Overcurrent protective devices Rating (A)	Overcurrent protective devices Fault current capacity (kA)	RCD Operating current, $I_{\Delta n}$ (mA)	Circuit impedances (Ω) Ring final circuits only r_1	Ring final circuits only r_n	Ring final circuits only r_2	All circuits R_1+R_2 or R_2*	Insulation resistance (MΩ) Between live conductors	Phase/Earth	Neutral/Earth	Polarity (✓)	Maximum measured earth fault loop impedance, Z_s (Ω)	RCD operating times (ms) at $I_{\Delta n}$	RCD operating times (ms) at $5I_{\Delta n}$ (if applicable)
4	SOCKETS IN OUTDOOR BOXES. PVC	SWA	6	2.5	2.5	2.87	61009	B	16	6	30	NA	NA	NA	0.80	NA	>299	>299	✓	0.76	30.1 / 30.0	8.8 / 8.7
	LIGHT BOLLARD.	SWA	1	2.5	2.5		60898	B	6	6	N/A	NA	NA	NA	0.34	NA	>299	>299	✓	0.88	~~N/A~~	~~N/A~~

TEST INSTRUMENTS USED — Make / Model / Serial Number

Multi-functional: MEGGER MFT 1553 6111-771-080

Insulation resistance:

Continuity:

Earth electrode resistance:

Earth fault loop impedance:

RCD:

* Delete as appropriate