NICEIC APPROVED CONTRACTOR

Block of Flats (32-34)

This certificate is not valid if the serial number has been defaced or altered ICN2/0091760

ELECTRICAL INSTALLATION CERTIFICATE

Issued in accordance with *British Standard 7671 – Requirements for Electrical Installations* by an Approved Contractor or Conforming Body enrolled with NICEIC, Warwick House, Houghton Hall Park, Houghton Regis, Dunstable, LU5 5ZX

Original (To the person ordering the work)

DETAILS OF THE CLIENT

Client / Address: BROUGHTON GRANGE RESIDENTS ASSOCIATON.

DETAILS OF THE INSTALLATION

Block of Flats nos 32-34.

Address: BROUGHTON GRANGE, MANOR RD, SWINDON

Extent of the installation covered by this certificate: Distal Hway Distribution Board to supply double socket in entrance to flats

The installation is: New ✓ / An addition / An alteration

DESIGN

I/We, being the person(s) responsible for the design of the electrical installation (as indicated by my/our signature(s) below), particulars of which are described above, having exercised reasonable skill and care when carrying out the design, hereby CERTIFY that the design work for which I/we have been responsible is, to the best of my/our knowledge and belief, in accordance with BS 7671 amended to (date) except for the departures, if any, detailed as follows:

Details of departures from BS 7671, as amended (Regulations 120.3, 120.4):

The extent of liability of the signatory/signatories is limited to the work described above as the subject of this certificate.
For the **DESIGN** of the installation: **(*Where there is divided responsibility for the design*)

Signature	Date	Name (CAPITALS)	
			Designer 1
			** Designer 2

CONSTRUCTION

I/We, being the person(s) responsible for the construction of the electrical installation (as indicated by my/our signature below), particulars of which are described above, having exercised reasonable skill and care when carrying out the construction, hereby CERTIFY that the construction work for which I/we have been responsible is, to the best of my/our knowledge and belief, in accordance with BS 7671 amended to (date) except for the the departures, if any, detailed as follows:

Details of departures from BS 7671, as amended (Regulations 120.3, 120.4):

The extent of liability of the signatory is limited to the work described above as the subject of this certificate.
For the **CONSTRUCTION** of the installation:

Signature	Date	Name (CAPITALS)	
			Constructor

INSPECTION AND TESTING

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 CERTIFY that the work for which I/we have been responsible is to the best of my/our knowledge and belief in accordance with BS 7671, amended to (date) except for the departures, if any, detailed as follows:

Details of departures from BS 7671, as amended (Regulations 120.3, 120.4):

The extent of liability of the signatory/signatories is limited to the work described above as the subject of this certificate.
For the **INSPECTION AND TESTING** of the installation:

Signature	Date		Reviewed by		
			Signature	Date	
Name (CAPITALS)		Inspector	Name (CAPITALS)		Qualified Supervisor †

DESIGN, CONSTRUCTION, INSPECTION AND TESTING *

* This box to be completed only where the design, construction, inspection and testing have been the responsibility of one person.

I, being the person responsible for the design, construction, inspection and testing of the electrical installation (as indicated by my signature below), particulars of which are described above, having exercised reasonable skill and care when carrying out the design, construction, inspection and testing, hereby CERTIFY that the said work for which I have been responsible is to the best of my knowledge and belief in accordance with BS 7671, amended to 2011 (date) except for the departures, if any, detailed as follows:

Details of departures from BS 7671, as amended (Regulations 120.3, 120.4):

The extent of liability of the signatory is limited to the work described above as the subject of this certificate.
For the **DESIGN**, the **CONSTRUCTION** and the **INSPECTION AND TESTING** of the installation.

Signature	Date		Reviewed by		
			Signature	Date	
Name (CAPITALS) M.S. ALEXANDER.	8/8/11		Name (CAPITALS) M.S. ALEXANDER	8/8/11	Qualified Supervisor ††

† *Where the inspection and testing have been carried out by an Approved Contractor, the inspection and testing results are to be reviewed by the registered Qualified Supervisor.*

†† *Where the design, the construction, and the inspection and testing have been the responsibility of one person, the inspection and testing results are to be reviewed by the registered Qualified Supervisor.*

This form is based on the model shown in Appendix 6 of BS 7671: 2008
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Please see the 'Notes for Recipients' on the reverse of this page.

NICEIC APPROVED CONTRACTOR

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Original (To the person ordering the work)

PARTICULARS OF THE ORGANISATION(S) RESPONSIBLE FOR THE ELECTRICAL INSTALLATION

DESIGN (1) Organisation †

Address: | NICEIC Enrolment No (where appropriate) | Branch number: (if applicable) | Postcode

DESIGN (2) Organisation †

Address: | NICEIC Enrolment No (where appropriate) | Branch number: (if applicable) | Postcode

† CONSTRUCTION Organisation Alexander Electrical Services

Address: 1 Falmouth Grove, Swindon | NICEIC Enrolment No (Essential information) 0271399 | Branch number: (if applicable) — | Postcode SN3 1EJ

INSPECTION AND TESTING Organisation †

Address: | NICEIC Enrolment No (where appropriate) | Branch number: (if applicable) | Postcode

SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS

Tick boxes and enter details, as appropriate

❖ System Type(s)

TN-S

TN-C-S ✓

TN-C

TT

IT

❖ Number and Type of Live Conductors

a.c. ✓ d.c.

1-phase (2 wire) ✓ | 1-phase (3 wire) | 2 pole

2-phase (3 wire) | 3-pole

3-phase (3 wire) | 3-phase (4 wire) | other

Other Please state

Nature of Supply Parameters

Nominal voltage(s): $U^{(1)}$ V $U_o^{(1)}$ 230 V

Nominal frequency, $f^{(1)}$ 50 Hz

Prospective fault current, $I_{pf}^{(2)(3)}$ 1.43 kA

External earth fault loop impedance, $Z_e^{(2)(3)}$ 0.24 Ω

Number of supplies 1

Notes:
(1) by enquiry
(2) by enquiry or by measurement
(3) where more than one supply, record the higher or highest values

❖ Characteristics of Primary Supply Overcurrent Protective Device(s)

BS(EN) 1361

Type 1/b

Rated current 100 A

Short-circuit capacity 3> kA

PARTICULARS OF INSTALLATION AT THE ORIGIN

Tick boxes and enter details, as appropriate

❖ Means of Earthing

Distributor's facility: ✓

Installation earth electrode: ✗

Details of Installation Earth Electrode (where applicable)

Type: (eg rod(s), tape etc) /

Electrode resistance, R_A: / (Ω)

Location:

Method of measurement: /

❖ Main Switch or Circuit-Breaker

* *(applicable only where an RCD is suitable and is used as a main circuit-breaker)*

Type: BS(EN) 61008

No of Poles 2

Supply conductors: material Cu

Supply conductors: csa 25 mm²

Voltage rating 230 V

Rated current, I_n 100 A

RCD operating current, $I_{\Delta n}$* 30 mA

RCD operating time (at $I_{\Delta n}$)* 28 ms

Maximum Demand (Load): 3 kVA / Amps *Delete as appropriate

Protective measures against electric shock: ADS

Earthing and Protective Bonding Conductors

Earthing conductor		Main protective bonding conductors		Bonding of extraneous-conductive-parts (✓)	
Conductor material	Cu	Conductor material	NA	Water service	Gas service
Conductor csa	16 mm²	Conductor csa	mm²	Oil service	Structural steel
Continuity check	✓ (✓)	Continuity check	(✓)	Lightning protection	Other incoming service(s)

COMMENTS ON EXISTING INSTALLATION

In the case of an alteration or additions see Section 633 ✓

Note: Enter 'NONE' or, where appropriate, the page number(s) of additional page(s) of comments on the existing installation.

NEXT INSPECTION

§ *Enter interval in terms of years, months or weeks, as appropriate*

I/We, the designer(s), RECOMMEND that this installation is further inspected and tested after an interval of not more than § 5 YEARS

† *Where the Approved Contractor responsible for the construction of the electrical installation has also been responsible for the design* ***and*** *the inspection and testing of that installation, the 'Particulars of the Organisation responsible for the Electrical Installation' may be recorded only in the section entitled 'CONSTRUCTION'.*

❖ *Where a number of sources are available to supply the installation, and where the data given for the primary source may differ from other sources, a separate sheet must be provided which identifies the relevant information relating to each additional source.*

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APPROVED CONTRACTOR

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SCHEDULE OF ITEMS INSPECTED

† *See note below*

PROTECTIVE MEASURES AGAINST ELECTRIC SHOCK

Basic and fault protection

Extra low voltage

N/A SELV N/A PELV

Double or reinforced insulation

N/A Double or Reinforced Insulation

Basic protection

✓ Insulation of live parts ✓ Barriers or enclosures

N/A Obstacles ** N/A Placing out of reach **

Fault protection

Automatic disconnection of supply

✓ Presence of earthing conductor

✓ Presence of circuit protective conductors

✓ Presence of main protective bonding conductors

N/A Presence of earthing arrangements for combined protective and functional purposes

N/A Presence of adequate arrangements for alternative source(s), where applicable

N/A FELV

✓ Choice and setting of protective and monitoring devices (for fault protection and/or overcurrent protection)

Non-conducting location **

N/A Absence of protective conductors

Earth-free equipotential bonding **

N/A Presence of earth-free equipotential bonding

Electrical separation

N/A For **one** item of current using equipment

N/A For **more** than one item of current using equipment **

Additional protection

✓ Presence of residual current device(s)

N/A Presence of supplementary bonding conductors

*** For use in controlled supervised/conditions only***

Prevention of mutual detrimental influence

✓ Proximity of non-electrical services and other influences

N/A Segregation of Band I and Band II circuits or Band II insulation used

N/A Segregation of Safety Circuits

Identification

✓ Presence of diagrams, instructions, circuit charts and similar information

✓ Presence of danger notices and other warning notices

✓ Labelling of protective devices, switches and terminals

✓ Identification of conductors

Cables and Conductors

✓ Selection of conductors for current carrying capacity and voltage drop

N/A Erection methods

N/A Routing of cables in prescribed zones

N/A Cables incorporating earthed armour or sheath or run in an earthed wiring system, or otherwise protected against nails, screws and the like

N/A Additional protection by 30mA RCD for cables concealed in walls (where required, in premises not under the supervision of skilled or instructed persons)

✓ Connection of conductors

N/A Presence of fire barriers, suitable seals and protection against thermal effects

General

✓ Presence and correct location of appropriate devices for isolation and switching

✓ Adequacy of access to switchgear and other equipment

N/A Particular protective measures for special installations and locations

N/A Connection of single-pole devices for protection or switching in line conductors only

✓ Correct connection of accessories and equipment

N/A Presence of undervoltage protective devices

✓ Selection of equipment and protective measures appropriate to external influences

✓ Selection of appropriate functional switching devices

SCHEDULE OF ITEMS TESTED

† *See note below*

✓ External earth fault loop impedance, Z_e

N/A Installation earth electrode resistance, R_A

✓ Continuity of protective conductors

N/A Continuity of ring final circuit conductors

✓ Insulation resistance between live conductors

✓ Insulation resistance between live conductors and Earth

N/A Protection by separation of circuits

N/A Basic protection by barrier or enclosure provided during erection

N/A Insulation of non-conducting floors or walls

✓ Polarity

✓ Earth fault loop impedance, Z_s

N/A Verification of phase sequence

N/A Operation of residual current devices

✓ Functional testing of assemblies

✓ Verification of voltage drop

SCHEDULE OF ADDITIONAL RECORDS* (See attached schedule)

Page No(s)

Note: Additional page(s) must be identified by the Electrical Installation Certificate serial number and page number(s).

† ***All boxes must be completed.*** *✓ indicates that an inspection or a test was carried out and that the result was* ***satisfactory****. 'N/A' indicates that an inspection or test was* ***not applicable*** *to the particular installation.*

* *Where the electrical work to which this certificate relates includes the installation of a fire alarm system and/or an emergency lighting system (or a part of such systems), this electrical safety certificate should be accompanied by the particular certificate(s) for the system(s).*

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NICEIC APPROVED CONTRACTOR

Original (To the person ordering the work)

SCHEDULE OF CIRCUIT DETAILS FOR THE INSTALLATION

TO BE COMPLETED IN EVERY CASE	TO BE COMPLETED ONLY IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION*
Location of distribution board: ENTRANCE HALL	Supply to distribution board is from: No of phases: Nominal voltage: V
	Overcurrent protective device for the distribution circuit: Associated RCD (if any): BS(EN)
Distribution board designation: NONE	Type: BS(EN) Rating: A RCD No of poles: $I_{\Delta n}$ mA

CIRCUIT DETAILS

Circuit number and phase	Circuit designation	Type of wiring (see code below)	Reference method †	Number of points served	Circuit conductors: csa Live (mm²)	cpc (mm²)	Max. disconnection time permitted by BS 7671 (s)	Overcurrent protective devices BS (EN)	Type No	Rating (A)	Short-circuit capacity (kA)	RCD Operating current, $I_{\Delta n}$ (mA)	Maximum Z_s permitted by BS 7671 (Ω)
1	doubleoutlet	A	B	1	2.5	1.5	0.4	60898	B	20	6	30	1.84
2	–												
3	–												
4	–												

† *See Table 4A2 of Appendix 4 of BS 7671: 2008*

CODES FOR TYPE OF WIRING

A	B	C	D	E	F	G	H	O (Other - please state)
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	

* *In such cases, details of the distribution (sub-main) circuit(s), together with the test results for the circuit(s), must also be provided on continuation schedules.*

See next page for Schedule of Test Results

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Original (To the person ordering the work)

SCHEDULE OF TEST RESULTS FOR THE INSTALLATION

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

Characteristics at this distribution board

Confirmation of supply polarity

☆ *See note below*

Z_s ☆ Ω — Operating times of associated RCD (if any) — At $I_{\Delta n}$ ms

I_{pf} ☆ kA — At $5I_{\Delta n}$ (if applicable) ms

Test instruments (serial numbers) used:

Earth fault loop impedance	3235465	RCD	4000580
Insulation resistance	3247709	Other	
Continuity	"	Other	

TEST RESULTS

Circuit number and phase	Circuit impedances (Ω)					Insulation resistance † *Record lower or lowest value*				Polarity	Maximum measured earth fault loop impedance, Z_s ☆ *See note below*	RCD operating times	
	Ring final circuits only (measured end to end)			All circuits (At least one column to be completed)		Line/Line †	Line/Neutral †	Line/Earth †	Neutral/Earth			at $I_{\Delta n}$	at $5I_{\Delta n}$ (if applicable)
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$R_1 + R_2$	R_2	(MΩ)	(MΩ)	(MΩ)	(MΩ)	(✓)	(Ω)	(ms)	(ms)
1				0.06			>200	>200	>200	✓	0.27	28	13
2													
3													
4													

☆ *Note: Where the installation can be supplied by more than one source, such as a primary source (eg public supply) and a secondary source (eg standby generator), the higher or highest values must be recorded.*

TESTED BY

Signature: [signature] Position: Principal

Name: (CAPITALS) M.S. ALEXANDER. Date of testing: 2/8/11

See previous page for Circuit Details