

ELECTRICAL INSTALLATION CERTIFICATE

Issued in accordance with BS 7671: 2018 – Requirements for Electrical Installations

PART 1 : DETAILS OF THE CONTRACTOR, CLIENT AND INSTALLATION

DETAILS OF THE CONTRACTOR

Registration No: 605076000 Branch No: 000
Trading Title: KBL Electrical limited
Address: 18 James Road, Kidderminster, Worcestershire
Postcode: DY10 2TR Tel No: 01562 910874

DETAILS OF THE CLIENT

Contractor Reference Number (CRN): Kingsgate House - New
Name: Dodd Group (Midlands)Ltd
Address: Dodds Group, Unit 1, Rabone Park, SMETHWICK, West Midlands
Postcode: B37 7DG Tel No: N/A

DETAILS OF THE INSTALLATION

Occupier: Solihull Community Housing
Address: Kingsgate House, Winchester Drive, Chelmsley Wood, Solihull, West Midlands
Postcode: B37 5PX Tel No: N/A

PART 2 : DETAILS OF THE ELECTRICAL WORK COVERED BY THIS INSTALLATION CERTIFICATE

Date works completed: 03/02/2020
The installation is –
New: (N/A)
An addition: (N/A)
An alteration: (N/A)
Replacement of a distribution board: (✓)
Description and extent of the installation covered by this certificate:
New Distribution Boards to the Landlord Services - No Rewiring has taken place during this installation
Where necessary, continue on a separate numbered page: Page No(s) (N/A)

PART 3 : NEXT INSPECTION OF THE ELECTRICAL INSTALLATION

I/We, being the designer(s) of the electrical installation as documented in PART 4, RECOMMEND that this installation is further inspected and tested after an interval of not more than: 2 years/~~XXXX~~** (delete as appropriate)

PART 4 : DECLARATION FOR THE ELECTRICAL INSTALLATION WORK (this option may be used where the design, construction, inspection & testing have been the responsibility of one person)

DESIGN, CONSTRUCTION, INSPECTION & TESTING (The extent of liability of the signatories is limited to the work detailed in PART 2)

I, being the person responsible for the design, construction, inspection and testing of the electrical installation, particulars of which are described in PART 2, having exercised reasonable skill and care when carrying out the design and additionally where this certificate applies to an addition or alteration, having confirmed that the safety of the existing installation is not impaired, hereby CERTIFY that the design, construction, inspection and testing for which I have been responsible is to the best of my knowledge and belief in accordance with BS 7671: 2018, amended to N/A (date) except for the departures, if any, detailed on attached page(s) (N/A) (Regulations 120.3, 133.1.3 and 133.5).

• Permitted exception applied (411.3.3) ~~XXXX~~ N/A Risk assessment attached: (N/A) Page No(s) (N/A) • Where selectivity is required, details of the verification appended (536.4): (N/A) Page No(s) (N/A)

Name (capitals): IAIN CLARE Signature:  Date: 13/04/2020

REVIEWED BY QUALIFIED SUPERVISOR

Name (capitals): KARL NORGROVE Signature:  Date: 14/04/2020

*Where applicable

**The proposed date for the next inspection should take into consideration any legislative or licensing requirements and the frequency and quality of maintenance that the installation can reasonably be expected to receive during its intended life. The period should be agreed between relevant parties.

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PART 4 : DECLARATION FOR THE ELECTRICAL INSTALLATION WORK (to be completed where different parties are responsible for the design, construction, inspection & testing)

DESIGN (The extent of liability of the signatories is limited to the work detailed in PART 2)

I/We being the person(s) responsible for the design of the electrical installation, particulars of which are described in PART 2, having exercised reasonable skill and care when carrying out the design and additionally where this certificate applies to an addition or alteration, having confirmed that the safety of the existing installation is not impaired, 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: 2018, amended to N/A (date) except for the departures, if any, detailed on attached page(s) (N/A) (Regulations 120.3, 133.1.3 and 133.5).

• Permitted exception applied (411.3.3) ~~XXX~~ N/A Risk assessment attached: (N/A) Page No(s) (N/A) • Where selectivity is required, details of the verification appended (536.4): (N/A) Page No(s) (N/A)

DESIGNER 1 Name (capitals): IAIN CLARE Signature:  Date: 13/04/2020
DESIGNER 2 (where there is divided responsibility for design) Name (capitals): N/A Signature: Date:

CONSTRUCTION (The extent of liability of the signatory is limited to the work detailed in PART 2)

I, being the person responsible for the construction of the electrical installation, particulars of which are described in PART 2, having exercised reasonable skill and care when carrying out the construction, 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: 2018, amended to N/A (date) except for the departures, if any, detailed on attached page(s) (N/A) (Regulations 120.3 and 133.5).

Name (capitals): IAIN CLARE Signature:  Date: 13/04/2020

INSPECTION & TESTING (The extent of liability of the signatories is limited to the work detailed in PART 2)

I, being the person responsible for the inspection and testing of the electrical installation, particulars of which are described in PART 2, having exercised reasonable skill and care when carrying out the 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: 2018, amended to N/A (date) except for the departures, if any, detailed on attached page(s) (N/A) (Regulations 120.3 and 133.5).

Name (capitals): IAIN CLARE Signature:  Date: 13/04/2020

REVIEWED BY QUALIFIED SUPERVISOR

Name (capitals): KARL NORGROVE Signature:  Date: 04/05/2020

PART 5 : COMMENTS ON THE EXISTING INSTALLATION (in the case of an addition or alteration see Regulation 644.1.2)

This Building is currently part of a program of works where the Landlords electrical installation is being upgraded throughout the building
.....
.....
.....
..... Where necessary, continue on a separate numbered page: Page No(s) (N/A)

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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PART 6 : DETAILS OF THE ORGANISATION(S) RESPONSIBLE FOR THE ELECTRICAL INSTALLATION (signatures of which are in PART 4)

DESIGN, CONSTRUCTION, INSPECTION & TESTING	DESIGN	DESIGNER 2	CONSTRUCTION	INSPECTION & TESTING
Organisation: KBL Electrical limited	DESIGNER 1 Organisation: KBL Electrical limited	DESIGNER 2 Organisation: N/A	Organisation: KBL Electrical limited	Organisation: KBL Electrical limited
Registration No*: 605076000	Registration No*: 605076000	Registration No*:	Registration No*: 605076000	Registration No*: 605076000
Branch No*: 000	Branch No*: 000	Branch No*:	Branch No*: 000	Branch No*: 000
Address: 18 James Road	Address: 18 James Road	Address:	Address: 18 James Road	Address: 18 James Road
Kidderminster Worcestershire	Kidderminster Worcestershire		Kidderminster Worcestershire	Kidderminster Worcestershire
Postcode: DY10 2TR	Postcode: DY10 2TR	Postcode:	Postcode: DY10 2TR	Postcode: DY10 2TR
Tel No: 01562 910874	Tel No: 01562 910874	Tel No:	Tel No: 01562 910874	Tel No: 01562 910874

PART 7 : SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS

System type and earthing arrangements	Number and type of live conductors	Nature of supply parameters
TN-C-S: (✓) TN-S: (N/A) TT: (N/A)	AC 1-phase, 2-wire: (N/A) 2-phase, 3-wire: (N/A)	Nominal line voltage, $U^{(1)}$: (400) V ^{(1) By enquiry, measurement, or by calculation}
Other (state): N/A	3-phase, 3-wire: (✓) 3-phase, 4-wire: (N/A)	Nominal line voltage to Earth, $U_0^{(1)}$: (230) V
Supply protective device	DC 2-wire: (N/A) 3-wire: (N/A) Other: (N/A)	Nominal frequency, $f^{(1)}$: (50) Hz
(BS (EN) 88-2)	Confirmation of supply polarity: (✓)	Prospective fault current, $I_{pf}^{(1)**}$: (10) kA
Type: (gG) Rated current: (400) A	Other sources of supply (as detailed on attached schedule) Page No: (N/A)	External loop impedance, $Z_e^{(1)**}$: (0.01) Ω

PART 8 : PARTICULARS OF INSTALLATION REFERRED TO IN THIS CERTIFICATE

Means of Earthing	Main protective conductors	Main protective bonding connections	Main switch / Switch-fuse / Circuit-breaker / RCD
Maximum demand (load): (360) XXX/ A (delete as appropriate)	Earthing conductor: (material Copper) csa 95 mm ²	Water installation pipes: (✓) (NA)	Type: (BS (EN) 88-2)
Distributor's facility: (✓)	Connection / continuity verified: (✓)	Gas installation pipes: (NA)	Location: (Main Switch Room 1)
Installation earth electrode: (N/A)	Main protective bonding conductors: (material Copper) csa 25 mm ²	Structural steel: (NA)	No. of poles: (3) Rating / setting of device: (100) A
Where an earth electrode is used insert	Connection / continuity verified: (✓)	Oil installation pipes: (NA)	Current rating: (100) A Voltage rating: (400) V
Type – rod(s), tape, etc: (None)		Lightning protection: (✓)	Where an RCD is used as the main switch
Location: (N/A)		Other (state): (N/A)	RCD rated residual operating current, $I_{\Delta n}$: (N/A) mA
Electrode resistance to Earth: (N/A) Ω			Measured operating time: (N/A) ms Rated time delay: (N/A) ms

*Where applicable

** Where the installation is supplied by more than one source, the higher or highest values of prospective fault current, I_{pf} , and external earth fault loop impedance, Z_e , must be recorded.

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PART 9 : SCHEDULE OF ITEMS INSPECTED – continues on next page

- 1. External condition of electrical intake equipment (visual inspection only)**
- 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): (✓)

2. Parallel or switched alternative sources of supply

- 2.1 Presence of adequate arrangements where generator to operate as a switched alternative:
a) Dedicated earthing arrangement independent of that of the public supply (N/A)
2.2 Presence of adequate arrangements where generator to operate in parallel with public supply:
a) Correct connection of generator in parallel (N/A)
b) Compatibility of characteristics of means of generation (N/A)
c) Means to provide automatic disconnection of generator in the event of loss of public supply or voltage or frequency deviation beyond declared values (N/A)
d) Means to prevent connection of generator in the event of loss of public supply or voltage or frequency deviation beyond declared values (N/A)
e) Means to isolate generator from public supply (N/A)
2.3 Presence of alternative / additional supply warning notices at or near:
a) The origin (N/A)
b) The meter position, if remote from origin (N/A)
c) The consumer unit / distribution board to which the alternative / additional sources are connected (N/A)
d) All points of isolation of ALL sources of supply (N/A)

3. Automatic disconnection of supply

- 3.1 Presence and adequacy of protective earthing / bonding arrangements as follows:
a) Distributor's earthing arrangement or installation earth electrode arrangement (✓)
b) Earthing conductor and connections (✓)
c) Main protective bonding conductors and connections (✓)
d) Earthing / bonding labels at all appropriate locations (✓)
3.2 Accessibility of:
a) Earthing conductor connections (✓)
b) All protective bonding connections (✓)

- 3.3 FELV – requirements satisfied: (N/A)
3.4 Reduced low voltage – requirements satisfied: (✓)

4. Additional protection

- 4.1 The presence and effectiveness of additional protection methods used, as follows:
a) RCDs not exceeding 30 mA operating current, as specified (✓)
b) Supplementary bonding (✓)

5. Basic protection (# For use in controlled / supervised conditions only)

- 5.1 Presence and adequacy of protective measures to provide basic protection:
a) Insulation of live parts (✓)
b) Barriers or enclosures (✓)
c) Obstacles ‡ (✓)
d) Placing out of reach ‡ (✓)

6. Basic and fault protection

- a) SELV (✓)
b) PELV (N/A)
c) Double or reinforced insulation (N/A)

When used, provide details on a separate numbered page: Page No (N/A)

7. Distribution equipment

- 7.1 Adequacy of working space / accessibility: (✓)
7.2 Security of fixing: (✓)
7.3 Insulation of live parts not damaged during erection: (✓)
7.4 Adequacy / security of barriers: (✓)
7.5 Suitability of enclosures for IP and fire ratings: (✓)
7.6 Enclosures not damaged during installation: (✓)
7.7 Presence and effectiveness of obstacles: (✓)
7.8 Presence and operation (functional) check of main switch(es): (✓)
7.9 Components are suitable according to assembly manufacturer's instructions or literature: (✓)
7.10 Operation of circuit-breakers and RCDs to prove functionality: (✓)
7.11 RCD(s) provided for fault protection, where specified: (✓)
7.12 RCD(s) provided for protection against fire, where specified: (✓)
7.13 RCD(s) provided for additional protection, where specified: (✓)
7.14 Confirmation overvoltage protection (SPDs) provided, where specified: (✓)

- 7.15 Indication of SPD(s) continued functionality confirmed: (✓)
7.16 Selection of protective devices(s) and base(s); correct type and rating: (✓)
7.17 Single-pole protective devices in line conductors only: (✓)
7.18 Protection against mechanical damage where cables enter equipment: (✓)
7.19 Protection against electromagnetic effects where cables enter ferromagnetic enclosures: (✓)
7.20 Confirmation that ALL conductor connections, including connections to busbars, are correctly located in terminals and are tight and secure: (✓)
7.21 Presence of RCD six-monthly test notice, where required: (✓)
7.22 Presence of diagrams, charts or schedules at or near each distribution board, where required: (✓)
7.23 Presence of next inspection recommendation label: (✓)
7.24 Presence of non-standard (mixed) cable colour warning notice at or near the appropriate distribution board, where required: (✓)
7.25 Presence of other required labelling: (✓)

8. Circuits

- 8.1 Identification of conductors: (✓)
8.2 Cables correctly supported throughout, with protection against abrasion: (✓)
8.3 Examination of cables for signs of mechanical damage during installation: (✓)
8.4 Examination of installation of live parts, not damaged during erection: (✓)
8.5 Non-sheathed cables protected by enclosure in conduit, ducting or trunking: (✓)
8.6 Suitability of containment systems (including flexible conduit): (✓)
8.7 Correct temperature rating of cable insulation: (✓)
8.8 Adequacy of cables for current-carrying capacity with regard to the type and nature of installation: (✓)
8.9 Adequacy of protective devices: type and fault current rating for fault protection: (✓)
8.10 Adequacy of AFDD(s), where specified: (N/A)
8.11 Presence and adequacy of circuit protective conductors: (✓)
8.12 Coordination between conductors and overload protective devices: (✓)

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PART 9 : SCHEDULE OF ITEMS INSPECTED

- 8.13 Wiring systems and cable installation methods / practices appropriate to the type and nature of installation and external influences: (.....) ✓
- 8.14 Cables concealed under floors, above ceilings, in walls / partitions, adequately protected against damage: (.....) ✓
- 8.15 Cables installed in walls / partitions, installed in prescribed zones: (.....) ✓
- 8.16 Provision of additional protection by RCDs having rated residual operating current ($I_{\Delta n}$) not exceeding 30 mA:
- a) For all socket-outlets with a rated current not exceeding 32 A or less, unless exempt (.....) ✓
 - b) For supplies to mobile equipment with a current rating not exceeding 32 A for use outdoors (.....) N/A
 - c) For cables concealed in walls / partitions at a depth of less than 50 mm (.....) ✓
 - d) For cables concealed in walls / partitions containing metal parts regardless of depth (.....) ✓
 - e) For circuits supplying luminaires within domestic (household) premises only (.....) N/A
- 8.17 Provision of fire barriers, sealing arrangements so as to minimise the spread of fire: (.....) ✓
- 8.18 Band II cables segregated / separated from Band I cables: (.....) ✓
- 8.19 Cables segregated / separated from non-electrical services: (.....) ✓
- 8.20 Termination of cables at enclosures:
- a) Connections under no undue strain (.....) ✓
 - b) No basic insulation of a conductor visible outside enclosure (.....) ✓
 - c) Connections of live conductors adequately enclosed (.....) ✓
 - d) Adequately connected at point of entry to enclosure (.....) ✓
- 8.21 Suitability of circuit accessories for external influences: (.....) ✓
- 8.22 Circuit accessories not damaged during erection: (.....) ✓
- 8.23 Single-pole devices for switching or protection in line conductors only: (.....) ✓

- 8.24 Adequacy of connections, including cpcs, within accessories and at fixed and stationary equipment: (.....) ✓

9. Isolation and switching

- 9.1 Isolators:
- a) Presence and location of appropriate devices (.....) ✓
 - b) Capable of being secured in the OFF position (.....) ✓
 - c) Correct operation verified (functional check) (.....) ✓
 - d) The installation, circuit or part thereof that will be isolated is clearly identified by location and / or durable marking (.....) ✓
 - e) Warning notice posted in situations where live parts cannot be isolated by the operation of a single device (.....) ✓
- 9.2 Switching off for mechanical maintenance:
- a) Presence of appropriate devices (.....) ✓
 - b) Acceptable location (local or remote) (.....) ✓
 - c) Capable of being secured in the OFF position (.....) ✓
 - d) Correct operation verified (functional check) (.....) ✓
 - e) The installation, circuit or part thereof to be disconnected clearly identified by location and / or durable marking (.....) ✓
- 9.3 Emergency switching / stopping:
- a) Presence of appropriate devices (.....) ✓
 - b) Readily accessible for operation where danger might occur (.....) ✓
 - c) Correct operation verified (functional check) (.....) ✓
 - d) The installation, circuit or part thereof to be disconnected clearly identified by location and / or durable marking (.....) ✓
 - e) Firefighter's switches present, where required: (.....) ✓
- 9.4 Functional switching:
- a) Presence of appropriate devices (.....) ✓
 - b) Correct operation verified (functional check) (.....) ✓

10. Current-using equipment (permanently connected)

- 10.1 Suitability of equipment in terms of IP and fire ratings: (.....) ✓
- 10.2 Enclosure not damaged / deteriorated during installation so as to impair safety: (.....) ✓
- 10.3 Suitability for the environment and external influences: (.....) ✓
- 10.4 Security of fixing: (.....) ✓
- 10.5 Cable entry holes in ceilings above luminaires, sized or sealed so as to restrict the spread of fire: (.....) ✓
- 10.6 Recessed luminaires (downlighters):
- a) Correct type of lamps fitted (.....) N/A
 - b) Installed to minimise build-up of heat (.....) N/A
- 10.7 Provision of undervoltage protection, where specified: (.....) N/A
- 10.8 Provision of overload protection, where specified: (.....) N/A
- 10.9 Adequacy of working space / accessibility to equipment: (.....) N/A

11. Special installations or locations

List below any special installations or locations which are part of the installation to be verified, and confirm that the additional requirements given in the respective section of Part 7 are fulfilled:

- N/A (.....) N/A
- (.....) (.....)
- (.....) (.....)
- (.....) (.....)
- (.....) (.....)

Details must be appended on a separate numbered page (see PART 10 below)

SCHEDULE OF ITEMS INSPECTED BY

Name (capital): IAIN CLARE

Signature:  Date: 13/04/2020

PART 10 : SCHEDULES AND ADDITIONAL PAGES

Schedule of Inspections	Schedule of Circuit Details and Test Results for the installation	Additional pages, including data sheets for additional sources	Special installations or locations (indicated in item 11 above)	Continuation sheets
Page No(s): (.....) 4 & 5	Page No(s): (.....) 6, 7-10	Page No(s): (.....) None	Page No(s): (.....) None	Page No(s): (.....) None

The pages identified are an essential part of this certificate.

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PART 11 : SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

Circuits/equipment vulnerable to damage when testing 3L3,2L2,8L3,3L2,8L2,9L3,1L1 ,2L1,3L1,4L1,9L1

CODES for Type of wiring		(A) Thermoplastic insulated / sheathed cables			(B) Thermoplastic cables in metallic conduit			(C) Thermoplastic cables in non-metallic conduit			(D) Thermoplastic cables in metallic trunking			(E) Thermoplastic cables in non-metallic trunking			(F) Thermoplastic / SWA cables			(G) Thermosetting / SWA cables			(H) Mineral-insulated cables			(I) other - state: N/A			
Circuit number	Circuit description	Type of wiring (see Codes)	Reference Method (BS 7671)	Number of points served	Circuit conductor csa		Max. disconnection time (BS 7671) (s)	Protective device				RCD Operating current, $I_{\Delta n}$ (mA)	Maximum permitted Z_s for installed protective device* (Ω)	Circuit impedances (Ω)					Insulation resistance			Polarity (✓)	Max. measured earth fault loop impedance, Z_s (Ω)	RCD operating time (ms)	Test buttons				
					Live (mm ²)	cpc (mm ²)		BS (EN)	Type	Rating (A)	Short-circuit capacity (kA)			Ring final circuits only (measured end to end)			All circuits (complete at least one column)		Live / Live (MΩ)	Live / Earth (MΩ)	Test voltage DC (V)				RCD (✓)	AFDD (✓)			
														(Line) r_1	(Neutral) r_n	(cpc) r_2	(R ₁ + R ₂)	R ₂											
1L1	Lights - Ground Floor Lobby Area	B	B	8	2.5	1.5	5	60898	C	10	10	N/A	2.19				0.32		500	500	500	✓	0.33		N/A	N/A			
1L2	Radial - Spur @ Front / Rear Doors	B	B	1	4	2.5	0.4	61009	C	20	10	30	1.09				0.39		500	500	500	✓	0.40	12	✓	N/A			
1L3	Lights - Front Canopy	B	B	4	2.5	1.5	5	60898	C	10	10	N/A	2.19				0.44		500	500	500		0.45		N/A	N/A			
2L1	Lights - Ground Floor - Entrance	B	B	8	2.5	1.5	5	60898	C	10	10	N/A	2.19				0.42		500	500	500	✓	0.43		N/A	N/A			
2L2	Lights - Caretaker / Bin Room	B	B	8	2.5	1.5	5	60898	C	10	10	N/A	2.19				0.60		500	500	500	✓	0.61		N/A	N/A			
2L3	Lights - Stairs Full Landing	B	B	17	1.5	1.5	5	60898	C	10	10	N/A	2.19				2.21		500	500	500	✓	2.22		N/A	N/A			
3L1	Lights - Ground Floor - Lift Lobby	B	B	8	2.5	1.5	0.4	60898	C	10	10	N/A	2.19				0.55		500	500	500	✓	0.56		N/A	N/A			
3L2	Lights- Caretaker Stores / Corridor	B	B	7	2.5	1.5	0.4	60898	C	10	10	N/A	2.19				0.40		500	500	500	✓	0.41		N/A	N/A			
3L3	Lights - Stairs - Half Landing	B	B	17	2.5	1.5	0.4	60898	C	10	10	N/A	2.19				1.34		500	500	500	✓	1.35		N/A	N/A			
4L1	Lights - Ground Floor - Rear	B	B	8	2.5	1.5	0.4	60898	C	10	10	N/A	2.19				0.44		500	500	500	✓	0.45		N/A	N/A			
4L2	Radial - CCTV - Fused Spurs	B	B	1	4	2.5	0.4	60898	C	20	10	N/A	1.09				LIM		500	500	500	✓	LIM		N/A	N/A			
4L3	Lights - External	F	C	8	6	6	0.4	60898	C	10	10	N/A	2.19				LIM		500	500	500	✓	LIM		N/A	N/A			
5L1	Lights - Risers - A,B,C,D	B	B	14	4	4	0.4	60898	C	32	10	N/A	0.68				0.63		500	500	500	✓	0.64		N/A	N/A			
5L2	Ring Main Sockets - Caretakers Area	B	B	10	4	2.5	0.4	61009	C	16	10	30	1.37	0.01	0.01	0.01	0.05		500	500	500	✓	0.06	12	✓	N/A			
5L3	Lights - External	F	C	6	6	6	0.4	60898	C	16	10	N/A	1.37				LIM		500	500	500	✓	LIM		N/A	N/A			
6L1	Radial - Fused Spur GF Lobby Area	B	B	1	4	2.5	0.4	61009	C	16	10	30	1.37				0.04		500	500	500	✓	0.05	12	✓	N/A			
6L2	Radial - Fused Spur - Risers	B	B	14	4	2.5	0.4	61009	C	16	10	30	1.37				0.63		500	500	500	✓	0.64	12	✓	N/A			
6L3	Radial - Fused Spur - Door Entry	B	B	2	4	2.5	0.4	60898	C	32	10	N/A	0.68				0.08		500	500	500	✓	0.09		N/A	N/A			

DISTRIBUTION BOARD (DB) DETAILS

(to be completed in every case)

DB designation: Kingsgate House CB 1 - Landlord Services
Location of DB: Mains Switch Room

TESTED BY

Name (capital letters) IAIN CLARE

Signature:

Position: Electrical Engineer

Date: 13/04/2020

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

Supply to DB is from: (N/A) Nominal voltage: (N/A) V No. of phases: (N/A)
Overcurrent protection device for the distribution circuit Type: (BS EN N/A) Rating: (N/A) A
Associated RCD (if any) Type: (BS EN N/A) No. of poles: (N/A) $I_{\Delta n}$ (N/A) mA Operating time (N/A) ms
Characteristics at this DB Confirmation of supply polarity: (N/A) Phase sequence confirmed (where appropriate): (N/A) Z_s (N/A) Ω I_{pf} (N/A) kA

TEST INSTRUMENTS (enter serial number against each instrument used)

Multi-function: (238878) Continuity: (N/A)
Insulation resistance: (N/A) Earth fault loop impedance: (N/A)
Earth electrode resistance: (N/A) RCD: (N/A)

CONTINUATION SHEET:

ELECTRICAL INSTALLATION CERTIFICATES & ELECTRICAL INSTALLATION CONDITION REPORTS

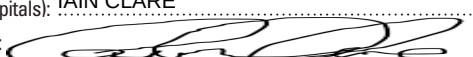
Issued in accordance with BS 7671: 2018 – Requirements for Electrical Installations

ICN / XXX : SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

(Delete as appropriate)

Circuits/equipment vulnerable to damage when testing 3L3,2L2,8L3,3L2,8L2,9L3,1L1,2L1,3L1,4L1,9L1

CODES for Type of wiring		(A) Thermoplastic insulated / sheathed cables	(B) Thermoplastic cables in metallic conduit	(C) Thermoplastic cables in non-metallic conduit			(D) Thermoplastic cables in metallic trunking	(E) Thermoplastic cables in non-metallic trunking			(F) Thermoplastic / SWA cables		(G) Thermosetting / SWA cables		(H) Mineral-insulated cables		(I) other - state: N/A									
Circuit number	Circuit description	Type of wiring (see Codes)	Reference Method (BS 7671)	Number of points served	Circuit conductor csa			Protective device				RCD Operating current, $I_{\Delta n}$ (mA)	Maximum permitted Z_s for installed protective device* (Ω)	Circuit impedances (Ω)					Insulation resistance			Polarity (✓)	Max. measured earth fault loop impedance, Z_s (Ω)	RCD operating time (ms)	Test buttons	
					Live (mm ²)	cpc (mm ²)	Max. disconnection time (BS 7671) (s)	BS (EN)	Type	Rating (A)	Short-circuit capacity (kA)			Ring final circuits only (measured end to end)			All circuits (complete at least one column)		Live / Live (MΩ)	Live / Earth (MΩ)	Test voltage DC (V)				RCD (✓)	AFDD (✓)
														(Line) r_1	(Neutral) r_n	(cpc) r_2	($R_1 + R_2$)	R_2								
7L1	Radial - Fire Alarm Panel	B	B	1	2.5	1.5	0.4	60898	C	16	10	N/A	1.37				0.01		500	500	500	✓	0.02		N/A	N/A
7L2	Ring Main - Sockets - Caretaker Area	B	B	7	4	4	0.4	61009	C	32	10	30	0.68	0.01	0.01	0.01	0.13		500	500	500	✓	0.14	12	✓	N/A
7L3	Radial - Easy Check Panel	B	B	1	2.5	1.5	5	60898	C	16	10	N/A	1.37				0.07		500	500	500	✓	0.08		N/A	N/A
8L1	Spare																									
8L2	Radial - Water Heater	B	B	1	4	2.5	0.4	61009	C	20	10	30	1.09				0.12		500	500	500	✓	0.13		✓	N/A
8L3	Lights - Signs	F	C	3	1.5	1.5	5	60898	C	10	10	N/A	2.19				LIM		500	500	500	✓	LIM		N/A	N/A
9L1	Radial - Sockets Lobby Area	B	B	1	4	2.5	0.4	61009	C	20	10	30	1.09				0.15		500	500	500	✓	0.16	13	✓	N/A
9L2	Spare																									
9L3	Lights - External Controls	F	B	1	1.5	1.5	5	60898	C	10	10	N/A	2.19				0.04		500	500	500	✓	0.05		N/A	N/A
10L1	Spare																									
10L2	Spare																									
10L3	Radial - Storage Heater - Lobby	B	B	1	4	4	0.4	60898	C	10	10	N/A	2.19				0.10		500	500	500	✓	0.11		N/A	N/A
11L1	Spare																									
11L2	Spare																									
11L3	Spare																									
12L1	Spare																									
12L2	Spare																									
12L3	Spare																									

DISTRIBUTION BOARD (DB) DETAILS (to be completed in every case)	DB designation: Kingsgate House CB 1 - Landlord Services	TESTED BY Name (capital): IAIN CLARE Signature: 	Position: Electrical Engineer Date: 13/04/2020
	Location of DB: Mains Switch Room		

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

Supply to DB is from: (N/A) Nominal voltage: (N/A) V No. of phases: (N/A)

Overcurrent protection device for the distribution circuit Type: (BS EN N/A) Rating: (N/A) A

Associated RCD (if any) Type: (BS EN N/A) No. of poles: (N/A) $I_{\Delta n}$ (N/A) mA Operating time (N/A) ms

Characteristics at this DB Confirmation of supply polarity: (N/A) Phase sequence confirmed (where appropriate): (N/A) Z_s (N/A) Ω I_{pf} (N/A) kA

TEST INSTRUMENTS (enter serial number against each instrument used)

Multi-function: (238878) Continuity: (N/A)

Insulation resistance: (N/A) Earth fault loop impedance: (N/A)

Earth electrode resistance: (N/A) RCD: (N/A)

CONTINUATION SHEET: ELECTRICAL INSTALLATION CERTIFICATES & ELECTRICAL INSTALLATION CONDITION REPORTS

Issued in accordance with BS 7671: 2018 – Requirements for Electrical Installations

ICN / XXX : SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

(Delete as appropriate)

Circuits/equipment vulnerable to damage when testing 1L1,4L1,5L3,1L2,8L3,8L2,3L3,3L1,6L1,5L1,2L2,6L2,8L1,5L2,2L3,4L3,3L2,6L3,1L3,4L2,2L1,7L1

CODES for Type of wiring		(A) Thermoplastic insulated / sheathed cables	(B) Thermoplastic cables in metallic conduit	(C) Thermoplastic cables in non-metallic conduit				(D) Thermoplastic cables in metallic trunking	(E) Thermoplastic cables in non-metallic trunking				(F) Thermoplastic / SWA cables		(G) Thermosetting / SWA cables		(H) Mineral-insulated cables		(I) other - state: N/A							
Circuit number	Circuit description	Type of wiring (see Codes)	Reference Method (BS 7671)	Number of points served	Circuit conductor csa		Max. disconnection time (BS 7671) (s)	Protective device				RCD Operating current, $I_{\Delta n}$ (mA)	Maximum permitted Z_s for installed protective device* (Ω)	Circuit impedances (Ω)					Insulation resistance			Polarity (✓)	Max. measured earth fault loop impedance, Z_s (Ω)	RCD operating time (ms)	Test buttons	
					Live (mm ²)	cpc (mm ²)		BS (EN)	Type	Rating (A)	Short-circuit capacity (kA)			Ring final circuits only (measured end to end)			All circuits (complete at least one column)		Live / Live (M Ω)	Live / Earth (M Ω)	Test voltage DC (V)				RCD (✓)	AFDD (✓)
														(Line) r_1	(Neutral) r_n	(cpc) r_2	($R_1 + R_2$)	R_2								
1L1	1st Floor Lights	B	B	9	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.45		500	500	500	✓	0.46			
1L2	2nd Floor Lights	B	B	9	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.33		500	500	500	✓	0.34			
1L3	3rd Floor Lights	B	B	6	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.55		500	500	500	✓	0.56			
2L1	1st Floor Lights	B	B	9	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.37		500	500	500	✓	0.38			
2L2	2nd Floor Lights	B	B	9	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.59		500	500	500	✓	0.60			
2L3	3rd Floor Lights	B	B	6	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.41		500	500	500	✓	0.42			
3L1	4th Floor Lights	B	B	9	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.38		500	500	500	✓	0.39			
3L2	5th Floor Lights	B	B	9	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.46		500	500	500	✓	0.47			
3L3	6th Floor Lights	B	B	6	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.60		500	500	500	✓	0.61			
4L1	4th Floor Lights	B	B	9	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.37		500	500	500	✓	0.38			
4L2	5th Floor Lights	B	B	9	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.44		500	500	500	✓	0.45			
4L3	6th Floor Lights	B	B	6	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.69		500	500	500	✓	0.70			
5L1	7th Floor lights	B	B	9	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.56		500	500	500	✓	0.57			
5L2	8th Floor Lights	B	B	9	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.51		500	500	500	✓	0.52			
5L3	9th Floor Lights	B	B	6	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.73		500	500	500	✓	0.74			
6L1	7th Floor Lights	B	B	9	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.48		500	500	500	✓	0.49			
6L2	8th Floor Lights	B	B	9	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.47		500	500	500	✓	0.48			
6L3	9th Floor Lights	B	A	6	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.58		500	500	500	✓	0.59			

DISTRIBUTION BOARD (DB) DETAILS

(to be completed in every case)

DB designation: Kingsgate House CB 2
Landlords Lighting
Location of DB: Mains Switch Room 1

TESTED BY

Name (capital): IAIN CLARE

Signature: 

Position: Electrical Engineer

Date: 13/04/2020

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

Supply to DB is from: (N/A) Nominal voltage: (N/A) V No. of phases: (N/A)

Overcurrent protection device for the distribution circuit Type: (BS EN N/A) Rating: (N/A) A

Associated RCD (if any) Type: (BS EN N/A) No. of poles: (N/A) $I_{\Delta n}$ (N/A) mA Operating time (N/A) ms

Characteristics at this DB Confirmation of supply polarity: (N/A) Phase sequence confirmed (where appropriate): (N/A) Z_s (N/A) Ω I_{pf} (N/A) kA

TEST INSTRUMENTS (enter serial number against each instrument used)

Multi-function: (238878) Continuity: (N/A)

Insulation resistance: (N/A) Earth fault loop impedance: (N/A)

Earth electrode resistance: (N/A) RCD: (N/A)

CONTINUATION SHEET:

ELECTRICAL INSTALLATION CERTIFICATES & ELECTRICAL INSTALLATION CONDITION REPORTS

Issued in accordance with BS 7671: 2018 – Requirements for Electrical Installations

ICN / XXX : SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

(Delete as appropriate)

Circuits/equipment vulnerable to damage when testing 1L1,4L1,5L3,1L2,8L3,8L2,3L3,3L1,6L1,5L1,2L2,6L2,8L1,5L2,2L3,4L3,3L2,6L3,1L3,4L2,2L4,7L1

CODES for Type of wiring		(A) Thermoplastic insulated / sheathed cables	(B) Thermoplastic cables in metallic conduit	(C) Thermoplastic cables in non-metallic conduit	(D) Thermoplastic cables in metallic trunking	(E) Thermoplastic cables in non-metallic trunking	(F) Thermoplastic / SWA cables	(G) Thermosetting / SWA cables	(H) Mineral-insulated cables	(I) other - state: N/A																	
Circuit number	Circuit description	Type of wiring (see Codes)	Reference Method (BS 7671)	Number of points served	Circuit conductor csa		Max. disconnection time (BS 7671) (s)	Protective device				RCD Operating current, $I_{\Delta n}$ (mA)	Maximum permitted Z_s for installed protective device* (Ω)	Circuit impedances (Ω)					Insulation resistance			Polarity (✓)	Max. measured earth fault loop impedance, Z_s (Ω)	RCD operating time (ms)	Test buttons		
					Live (mm ²)	cpc (mm ²)		BS (EN)	Type	Rating (A)	Short-circuit capacity (kA)			Ring final circuits only (measured end to end)			All circuits (complete at least one column)		Live / Live (MΩ)	Live / Earth (MΩ)	Test voltage DC (V)				RCD (✓)	AFDD (✓)	
														(Line) r_1	(Neutral) r_n	(cpc) r_2	($R_1 + R_2$)	R_2									
7L1	10th Floor Lights	B	B	9	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.72		500	500	500	✓	0.73				
7L2	Lights - Riser A	B	B	10	1.5	1.5	5	60898	C	6	10	30	3.64				0.35		500	500	500	✓	0.36				
7L3	Lights - Riser B	B	B	10	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.56		500	500	500	✓	0.57				
8L1	10th Floor Lights	B	B	9	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.62		500	500	500	✓	0.63				
8L2	Lights - Riser C	B	B	10	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.36		500	500	500	✓	0.37				
8L3	Lights - Riser D	B	B	10	1.5	1.5	5	60898	C	6	10	N/A	3.64				0.40		500	500	500	✓	0.41				
9L1	Spare																										
9L2	Radial - Dry Room Sockets Floor 4/5	A	B	4	4	2.5	0.4	61009	C	20	10	30	1.09				0.44		500	500	500	✓	0.45	13	✓		
9L3	Spare																										
10L1	Spare																										
10L2	Radial - Riser A Sockets	A	B	10	4	2.5	0.4	61009	C	20	10	30	1.09				0.43		500	500	500	✓	0.44	12	✓		
10L3	Radila - Riser B Sockets	A	B	10	4	2.5	0.4	61009	C	20	10	30	1.09				0.79		500	500	500	✓	0.80	12	✓		
11L1	Spare																										
11L2	Spare																										
11L3	Spare																										
12L1	Spare																										
12L2	Spare																										
12L34	Spare																										

DISTRIBUTION BOARD (DB) DETAILS

(to be completed in every case)

DB designation: Kingsgate House CB 2
Landlords Lighting
Location of DB: Mains Switch Room 1

TESTED BY

Name (capital): IAIN CLARE

Signature: 

Position: Electrical Engineer

Date: 13/04/2020

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

Supply to DB is from: (N/A) Nominal voltage: (N/A) V No. of phases: (N/A)

Overcurrent protection device for the distribution circuit Type: (BS EN N/A) Rating: (N/A) A

Associated RCD (if any) Type: (BS EN N/A) No. of poles: (N/A) $I_{\Delta n}$ (N/A) mA Operating time (N/A) ms

Characteristics at this DB Confirmation of supply polarity: (N/A) Phase sequence confirmed (where appropriate): (N/A) Z_s (N/A) Ω I_{pf} (N/A) kA

TEST INSTRUMENTS (enter serial number against each instrument used)

Multi-function: (238878) Continuity: (N/A)

Insulation resistance: (N/A) Earth fault loop impedance: (N/A)

Earth electrode resistance: (N/A) RCD: (N/A)

CONTINUATION SHEET:

ELECTRICAL INSTALLATION CERTIFICATES & ELECTRICAL INSTALLATION CONDITION REPORTS

Issued in accordance with BS 7671: 2018 – Requirements for Electrical Installations

ICN /XXX : SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

(Delete as appropriate)

Circuits/equipment vulnerable to damage when testing L7,L5,L6

[illegible]

DISTRIBUTION BOARD (DB) DETAILS

(to be completed in every case)

DB designation: Kingsgate House CB 3 Lift
Motor Room
Location of DB: Lift Motor Room

TESTED BY

Name (capitals): IAIN CLARE

Signature: _____

Position: Electrical Engineer

Date: 13/04/2020

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

Supply to DB is from: (<u>N/A</u>)		Nominal voltage: (<u>N/A</u>) V	No. of phases: (<u>N/A</u>)
Overcurrent protection device for the distribution circuit	Type: (BS EN <u>N/A</u>)	Rating: (<u>N/A</u>) A	
Associated RCD (if any)	Type: (BS EN <u>N/A</u>)	No. of poles: (<u>N/A</u>)	$I_{\Delta n}$ (<u>N/A</u>) mA Operating time (<u>N/A</u>) ms
Characteristics at this DB	Confirmation of supply polarity: (<u>N/A</u>)	Phase sequence confirmed (where appropriate): (<u>N/A</u>)	Z_s (<u>N/A</u>) Ω I_{pf} (<u>N/A</u>) kA

TEST INSTRUMENTS (enter serial number against each instrument used)

Multi-function: (238878)	Continuity: (N/A)
Insulation resistance: (N/A)	Earth fault loop impedance: (N/A)
Earth electrode resistance: (N/A)	RCD: (N/A)

NOTES FOR RECIPIENT

THIS CERTIFICATE IS AN IMPORTANT AND VALUABLE DOCUMENT WHICH SHOULD BE RETAINED FOR FUTURE USE

If you were the person ordering the work, but not the user of the installation, you should pass this certificate, or a full copy of it including these notes, the schedules and additional pages (if any), immediately to the user.

This safety certificate has been issued to confirm that the electrical installation work to which it relates has been designed, constructed, inspected, tested and verified in accordance with the national standard for the safety of electrical installations, *BS 7671: 2018 (as amended) - Requirements for Electrical Installations* (the IET Wiring Regulations).

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 every six months. For safety reasons it is important that this instruction is followed.

Also for safety reasons, the complete electrical installation will need to be inspected and tested at appropriate intervals by a skilled person or persons competent in such work. NICEIC* recommends that you engage the services of an NICEIC Approved Contractor for this purpose. The maximum interval recommended before the next inspection is stated in PART 3. There should be a notice at or near the main switchboard or distribution board indicating the date when the next inspection is due.

Only an NICEIC Approved Contractor or Conforming Body responsible for the construction of the electrical installation is authorised to issue this NICEIC Electrical Installation Certificate.

The certificate, which consists of at least six numbered pages, is only valid if accompanied by the *Schedule of Items Inspected* and the *Schedule of Circuit Details and Test Results*. The certificate has a printed serial number which is traceable to the Contractor to which it was supplied.

For installations having more than one distribution board (or consumer unit) or more circuits than can be recorded on Page 6, one or more additional *Schedules of Circuit Details and Test Results*, should form part of the certificate.

This certificate is intended to be issued only for a new electrical installation or for new work associated with an addition or alteration to an existing installation, or for the replacement of a distribution board (or consumer unit). It should not have been issued for the inspection of an existing electrical installation. An 'Electrical Installation Condition Report' should be issued for such a periodic inspection.

This certificate should not have been issued for electrical work in a potentially explosive atmosphere (hazardous area) unless the Approved Contractor holds an appropriate extension to their NICEIC registration for such work.

You should have received the certificate marked 'Original' and the Approved Contractor should have retained the certificate marked 'Duplicate'.

The 'Original' certificate should be retained in a safe place and shown to any skilled person inspecting or undertaking further work on the electrical installation in the future. If you later vacate the property, this certificate will demonstrate to the new user that the electrical installation complied with the requirements of BS 7671 at the time the certificate was issued.

The *Construction (Design and Management) Regulations* require that, for a project covered by those Regulations, a copy of this certificate, together with schedules, is included in the project health and safety documentation.

Page 1 and 2 of this certificate provide details of the electrical installation, together with the name(s) and signature(s) of the person(s) certifying the three elements of installation work: design, construction and inspection and testing, and page 3 identifies the organisation(s) responsible for the work certified by their representative(s).

Certification for inspection and testing provides an assurance that the electrical installation work has been fully inspected and tested, and that the electrical work has been carried out in accordance with the requirements of *BS 7671: 2018* (as amended) (except for any departures sanctioned by the designer and appended to the certificate).

Where responsibility for the design, the construction and the inspection and testing of the electrical work is divided between the Approved Contractor and one or more other bodies, the division of responsibility should have been established and agreed before commencement of the work. In such a case, NICEIC considers that the absence of certification for the construction, or the inspection and testing elements of the work would render the certificate invalid. If the design section of the certificate has not been completed, NICEIC recommends that you question why those responsible for the design have not certified that this important element of the work is in accordance with *BS 7671*.

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) in accordance with British Standards *BS 5839* and *BS 5266* respectively, this electrical safety certificate should be accompanied by a separate certificate or certificates as prescribed by those standards.

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, an additional page should have been provided which gives the relevant information relating to each additional source, and to the associated earthing arrangements and main switchgear.

Should the person ordering the work (e.g. the client, as identified on Page 1 of this certificate), have reason to believe that any element of the work for which the Approved Contractor has accepted responsibility (as indicated by the signatures on this certificate) does not comply with *BS 7671: 2018* (as amended), the client should in the first instance raise the specific concerns in writing with the Approved Contractor. If the concerns remain unresolved, the client may make a formal complaint to NICEIC, for which purpose a standard complaint form is available on request.

The complaints procedure offered by NICEIC is subject to certain terms and conditions, full details of which are available upon application. NICEIC does not investigate complaints relating to the operational performance of electrical installations (such as lighting levels), or to contractual or commercial issues (such as time or cost).

** NICEIC is operated by Certsure LLP, a partnership between the Electrical Contractors' Association and the charity, Electrical Safety First. NICEIC maintains and publishes registers of electrical contractors that it has assessed against particular scheme requirements (including the technical standard of electrical work).*

For further information about electrical safety and how NICEIC can help you, visit www.niceic.com