

ELECTRICAL INSTALLATION CERTIFICATE

Issued in accordance with British Standard BS 7671 - Requirements for Electrical Installations

Certificate Reference: Grenfell Tower / 145002

1. DETAILS OF THE CLIENT

Client Address: The Royal Borough of Kensington & Chelsea , TMO, Network Hub, 292a Kensal Road, London, W10 5BE

2. DETAILS OF THE INSTALLATION

Installation Address: Grenfell Tower, Grenfell Road, London, W11 1TQ

Extent of the installation covered by this certificate: New CC1H120mm MICC supply cable from domestic riser sub-mains service head 2.to riser enclosure in walkway riser cupboard.

The installation is: New N/A An addition N/A An alteration

3. DESIGN

I/We being the person(s) responsible for the design 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 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 7671:2008, amended to 2011 except for the departures, if any, detailed as follows.

Details of departures from BS 7671 (Regulations 120.3, 133.5): N/A

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:

Name: N/A Position: N/A Signature: N/A Date: N/A

Where there is divided responsibility for the design:

Name: N/A Position: N/A Signature: N/A Date: N/A


4. CONSTRUCTION

I/We being the person(s) responsible for the construction 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 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 7671:2008, amended to 2011 except for the departures, if any, detailed as follows.

Details of departures from BS 7671 (Regulations 120.3, 133.5): N/A

The extent of liability of the signatory/signatories is limited to the work described above as the subject of this certificate.

For the CONSTRUCTION of the installation:

Name: Bob Greene Position: Qualified Supervisor Signature:  Date: 09/07/2013


5. 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 inspection and testing work for which I/we have been responsible is to the best of my/our knowledge and belief in accordance with BS 7671:2008, amended to 2011 except for the departures, if any, detailed as follows.

Details of departures from BS 7671 (Regulations 120.3, 133.5): N/A

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:

Name: Bob Greene Position: Qualified Supervisor Signature:  Date: 09/07/2013

Report reviewed and confirmed by:

Name: Bob Greene Position: Qualified Supervisor Signature:  Date: 09/07/2013

6. DESIGN, CONSTRUCTION, INSPECTION AND TESTING

I/We being the person(s) responsible for the design, construction, 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 design, construction, inspection and testing, 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 7671:2008, amended to 2011 except for the departures, if any, detailed as follows.

Details of departures from BS 7671 (Regulations 120.3, 133.5): N/A

The extent of liability of the signatory/signatories 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:

Name: N/A Position: N/A Signature: N/A Date: N/A


Report reviewed and confirmed by:

Name: N/A Position: N/A Signature: N/A Date: N/A

7. NEXT INSPECTION

I/We the designer(s), RECOMMEND that this installation is further inspected and tested after an interval of not more than: 2 Months

8. DETAILS OF THE ELECTRICAL CONTRACTOR

Design (1)	Trading Title: RGE Services Ltd		
Address:	19-21 Roebuck Road		Registration Number (if applicable):
	Hainault Business Park		
	Essex	Postcode: IG6 3TU	Telephone Number:
Design (2)	Trading Title:		
Address:			Registration Number (if applicable):
			Telephone Number:
Construction	Trading Title:		
Address:			Registration Number (if applicable):
			Telephone Number:
Inspection and Testing	Trading Title:		
Address:			Registration Number (if applicable):
			Telephone Number:

9. SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS

System Type(s)	Number and Type of Live Conductors				Nature of Supply Parameters		Characteristics of Primary Supply Overcurrent Protective Device(s)	
TN-S <input checked="" type="checkbox"/>	ac: <input checked="" type="checkbox"/>	dc: <input type="checkbox"/>	1-phase (2 wire): <input type="checkbox"/>	1-phase (3 wire): <input type="checkbox"/>	Nominal voltage(s): U: 400 V U ₀ : 230 V			
TN-C-S <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2 pole: <input type="checkbox"/>	3 pole: <input type="checkbox"/>	Nominal frequency, f: 50 Hz	BS(EN):	88-2 Fuse HRC	
TNC <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3-phase (3 wire): <input type="checkbox"/>	3-phase (4 wire): <input checked="" type="checkbox"/>	Prospective fault current, I _{pf} : 1.21 kA	Type:	gG	
TT <input type="checkbox"/>	Other: <input type="checkbox"/>				External earth fault loop impedance, Z _e : 0.19 Ω	Rated current:	400 A	
IT <input type="checkbox"/>	Confirmation of supply polarity: <input checked="" type="checkbox"/>				Number of supplies: 2	Short-circuit capacity:	80 kA	

10. PARTICULARS OF INSTALLATION AT THE ORIGIN

Means of Earthing		Details of Installation Earth Electrode (where applicable)			
Distributor's facility: <input checked="" type="checkbox"/>	Type: <input type="checkbox"/>	N/A		Location: <input type="checkbox"/>	
Installation earth electrode: <input type="checkbox"/>	Electrode resistance, R _A : <input type="checkbox"/>	N/A Ω		Method of measurement: <input type="checkbox"/>	
Maximum Demand (Load): <input type="checkbox"/>		N/A N/A		Protective measure(s) against electric shock: <input type="checkbox"/>	
Main Switch or Circuit-Breaker			Earthing and Protective Bonding Conductors		
Type BS(EN): <input type="checkbox"/>	Voltage rating: <input type="checkbox"/>	N/A V		Earthing conductor	
Number of poles: <input type="checkbox"/>	Rated current, I _n : <input type="checkbox"/>	N/A A		Conductor material: <input type="checkbox"/>	Conductor csa: <input type="checkbox"/>
Supply conductors material: <input type="checkbox"/>	RCD operating current: <input type="checkbox"/>	N/A mA		Main protective bonding conductors	
Supply conductors csa: <input type="checkbox"/>	RCD operating time: <input type="checkbox"/>	N/A ms		Conductor material: <input type="checkbox"/>	Conductor csa: <input type="checkbox"/>
			Bonding of extraneous-conductive parts		
Water service: <input type="checkbox"/>		Gas service: <input type="checkbox"/>	Oil service: <input type="checkbox"/>	Lightning protection: <input type="checkbox"/>	
Structural Steel: <input type="checkbox"/>		Other incoming service(s): <input type="checkbox"/>		N/A	

11. COMMENTS ON EXISTING INSTALLATION

Would suggest monitoring all rising main connections whilst surrounding building works ongoing. Vibration present. Existing

12. SCHEDULE OF ITEMS INSPECTED

Methods of protection against electric shock

Both basic and fault protection:

- N/A (i) SELV
- N/A (ii) PELV
- LIM (iii) Double or Reinforced Insulation

Basic protection:

- (i) Insulation of live parts
- LIM (ii) Barriers or enclosures
- N/A (iii) Obstacles **
- N/A (iv) Placing out of reach **

Fault protection:

(i) Automatic disconnection of supply

- Presence of earthing conductor
- N/A Presence of circuit protective conductors
- N/A 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)

(ii) Non-conducting location **

- N/A Absence of protective conductors

(iii) Earth-free local equipotential bonding **

- N/A Presence of earth-free local equipotential bonding

(iv) Electrical Separation

- N/A Provided for 'one item' of current-using equipment
- N/A Provided for 'more than one item' of current-using equipment **

Additional protection:

- N/A 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

- (a) Proximity of non-electrical services and other influences
- N/A (b) Segregation of Band I and Band II circuits or use of Band II insulation
- N/A (c) Segregation of safety circuits

Identification

- N/A Presence of diagrams, instructions, circuit charts and similar information
- N/A Presence of danger notices and other warning notices
- N/A Labelling of protective devices, switches and terminals
- N/A Identification of conductors

Cables and Conductors

- N/A Selection of conductors for current carrying capacity and voltage drop
- N/A Erection methods
- N/A Routing of cables in prescribed zones or within mechanical protection
- LIM Cables incorporating earthed armour or sheath, or run within an earthed wiring system, or otherwise adequately protected against nails, screws and the like
- N/A Additional protection provided by 30mA RCD for cables in concealed walls (where required in premises not under the supervision of skilled or instructed persons)

- Connection of conductors

- X Presence of fire barriers, suitable seals and protection against thermal effects

General

- X Presence and correct location of appropriate devices for isolation and switching
- X 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
- Presence of undervoltage protective devices
- N/A Selection of equipment and protective measures appropriate to external influences
- N/A Selection of appropriate functional switching devices

13. SCHEDULE OF ITEMS TESTED

- External earth fault loop impedance, Ze
- N/A Installation earth electrode resistance, RA
- 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 Protection against direct contact by barrier or enclosure provided during erection
- N/A Insulation of non-conducting floors or walls
- Polarity
- Earth fault loop impedance, Zs
- Verification of phase sequence
- N/A Operation of residual current device(s)
- Functional testing of assemblies
- Verification of voltage drop

All boxes must be completed. 'tick' indicates that an inspection or test was carried out and that the result was satisfactory. 'X' indicates that an inspection or test was carried out and the result is not satisfactory. 'N/A' indicates that an inspection or test was not applicable to the particular installation. 'LIM' indicates that, exceptionally, a limitation agreed with the person ordering the work prevented the inspection or test being carried out.

CIRCUIT DETAILS

Distribution board designation:

Service Head 2

Location:

Main Intake room

Circuit number and phase	Circuit designation	Type of wiring	Reference Method	Number of points served	Live conductors: mm ²	Circuit conductors: mm ²	Max disconnect times permitted by BS7671	BS(EN)	Type No	A Rating	Short-circuit Capacity KA	Operating current MA	RCD	Overcurrent protective devices	
														Maximum Zs permitted by BS7671	Operating current MA
1	11th to 20th Flat Ryfields	H	F	1	120	37	5	88-2	gg	400	80	N/A	N/A		
2	11th to 20th Flat Ryfields	H	F	1	120	37	5	88-2	gg	400	80	N/A	N/A		
3	11th to 20th Flat Ryfields	H	F	1	120	37	5	88-2	gg	400	80	N/A	N/A		

APPLIES WHEN THE BOARD IS NOT CONNECTED TO THE ORIGIN OF THE INSTALLATION													
BOARD CHARACTERISTICS													
Supply to this distribution board is from:													
Origin													
Overcurrent protective device for the distribution circuit:													
BS(EN):													
Rating:													
No of poles:													
At In: N/A ms													
At Sin: N/A ms													
Confirmation of supply polarity													
Zs: N/A Ω													
Ipr: N/A kA													
RCD operating times													
RCD													
Type of Wiring O-Other: N/A													

