

DOMESTIC ELECTRICAL INSTALLATION CERTIFICATE

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

Certificate Reference: EIC-0408181-001

1 DETAILS OF THE CLIENT	
Client:	Y & T Properties Ltd
Address:	40 Fairfield Avenue, Upminster, Essex, RM14 3AY

2 DETAILS AND EXTENT OF THE INSTALLATION							
Installation Address:	85 Spencer Rd, Stoke, Stoke-on-Trent, Staffs, ST4 2BE						
Extent of the installation covered by this certificate:	Complete rewire						
The installation is:	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">New installation</td> <td style="text-align: center;"><input type="checkbox"/> N/A</td> <td style="text-align: center;">Addition to an existing installation</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">Alteration to an existing installation</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table>	New installation	<input type="checkbox"/> N/A	Addition to an existing installation	<input checked="" type="checkbox"/>	Alteration to an existing installation	<input checked="" type="checkbox"/>
New installation	<input type="checkbox"/> N/A	Addition to an existing installation	<input checked="" type="checkbox"/>	Alteration to an existing installation	<input checked="" type="checkbox"/>		

3 COMMENTS ON EXISTING INSTALLATION	
10mm Earthing conductor from the rod to the MET, then 16mm to the consumer unit	

4 NEXT INSPECTION	
I RECOMMEND that this installation is further inspected and tested after an interval of not more than:	10 Years

5 TEST INSTRUMENTS			
Details of Test Instruments used (state serial and/or asset numbers):			
Multi-functional:	10114610	Earth electrode resistance:	N/A
Insulation resistance:	N/A	Earth fault loop impedance:	N/A
Continuity:	N/A	RCD:	N/A

6 DESIGN, CONSTRUCTION, INSPECTION AND TESTING	
<p>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 2015 except for the departures, if any, detailed as follows.</p>	
Details of departures from BS 7671, as amended (Regulations 120.3, 133.5): None	
Details of permitted exceptions (Regulations 411.3.3): None	
Risk assessment attached <input type="checkbox"/>	
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:	Mark Turner
Position:	Electrician
Signature:	
Date:	04/08/2018

7 DETAILS OF THE ELECTRICAL CONTRACTOR			
Trading Title:	ETi		
Address:	53 Priam Close Bradwell Newcastle, Staffs	Registration Number (if applicable):	607173000
	Postcode: ST5 8LJ	Telephone Number:	0777 222 1876

8 SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS											
Earthing Arrangements		Number and Type of Live Conductors			Nature of Supply Parameters		Supply Protective Device				
TN-S	N/A	1-phase (2 wire):	<input checked="" type="checkbox"/>	1-phase (3 wire):	N/A	Nominal voltage(s): U:	240 V	U ₀ :	230 V	BS(EN):	1361 Fuse HBC
TN-C-S	N/A	3-phase (3 wire):	N/A	3-phase (4 wire):	N/A	Nominal frequency, f:	50 Hz	Prospective fault current, I _{pf} :	1.15 kA	Type:	2
TT	<input checked="" type="checkbox"/>	Other:	N/A			External earth fault loop impedance, Z _e :	0.35 Ω	Rated current:	80 A	Short-circuit capacity:	33 kA
		Confirmation of supply polarity:			<input checked="" type="checkbox"/>						

9 PARTICULARS OF INSTALLATION REFERRED TO IN THE CERTIFICATE						
Means of Earthing		Details of Installation Earth Electrode (where applicable)				
Distributor's facility:	N/A	Type:	Earth Rod		Location:	Front bedroom
Installation earth electrode:	<input checked="" type="checkbox"/>	Resistance to Earth:	N/A Ω		Method of measurement:	Test Method 2 (Loop Tester)
Maximum Demand (Load):	70 Amps	Protective measure(s) against electric shock:	ADS		Measured Z _e :	70.3 Ω
Main Switch / Switch-Fuse / Circuit-Breaker / RCD						
Type	60947-3 Isolator		Current rating:	100 A	Supply conductors material:	Copper
BS(EN):			Fuse/device rating or setting:	N/A A	Supply conductors csa:	25 mm ²
Number of poles:	2		Voltage rating:	240 V	If RCD main switch:	
					Rated residual operating current (IΔn):	N/A mA
					Rated time delay:	N/A ms
					Measured operating time (at IΔn):	N/A ms
Earthing and Protective Bonding Conductors						
Earthing conductor		Connection/continuity verified:		Bonding of extraneous-conductive parts		
Conductor material:	Copper	csa:	10/1 mm ²	<input checked="" type="checkbox"/>	To water installation pipes:	<input checked="" type="checkbox"/>
Main protective bonding conductors		Connection/continuity verified:		To gas installation pipes:		
Conductor material:	Copper	csa:	10 mm ²	<input checked="" type="checkbox"/>	To oil installation pipes:	N/A
				To lightning protection:		
				To structural steel:		
				To other service(s):		
				N/A		

10 SCHEDULE OF ITEMS INSPECTED		
Item	Description	Outcome
1.0	DISTRIBUTOR'S / SUPPLY INTAKE EQUIPMENT	
1.1	Condition of service cable	<input checked="" type="checkbox"/>
1.2	Condition of service head	<input checked="" type="checkbox"/>
1.3	Condition of distributor's earthing arrangement	<input checked="" type="checkbox"/>
1.4	Condition of tails - Distributor/Consumer	<input checked="" type="checkbox"/>
1.5	Condition of metering equipment	<input checked="" type="checkbox"/>
1.6	Condition of isolator (where present)	<input checked="" type="checkbox"/>
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	Presence and adequacy of earthing and protective bonding arrangements:	
3.1.1	Installation earth electrode (where applicable) (542.1.2.3)	N/A
3.1.2	Earthing conductor and connections including accessibility (542.3; 543.3.2)	<input checked="" type="checkbox"/>
3.1.3	Main protective bonding conductors and connections, including accessibility (411.3.1.2; 543.3.2)	<input checked="" type="checkbox"/>
3.1.4	Provision of safety electrical earthing / bonding labels at all appropriate locations (514.13)	<input checked="" type="checkbox"/>
3.1.5	RCD(s) provided for fault protection (411.4.9; 411.5.3)	<input checked="" type="checkbox"/>
4.0	BASIC PROTECTION	
4.1	Presence and adequacy of measures to provide basic protection (prevention of contact with live parts) within the installation:	
4.1.1	Insulation of live parts e.g. conductors completely covered with durable insulation materials (416.1)	<input checked="" type="checkbox"/>
4.1.2	Barriers or enclosures e.g. correct IP rating (416.2)	<input checked="" type="checkbox"/>

11 SCHEDULE OF ITEMS INSPECTED

Item	Description	Outcome
5.0	ADDITIONAL PROTECTION	
5.1	Presence and effectiveness of additional protection methods:	
5.1.1	RCD(s) not exceeding 30mA operating current (415.1; Part 7), see Item 8.14 of this schedule	✓
5.1.2	Supplementary bonding (415.2; Part 7)	N/A
6.0	OTHER METHODS OF PROTECTION	
6.1	Presence and effectiveness of methods which give both basic and fault protection:	
6.1.1	SELV systems including the source and associated circuits (Section 414)	N/A
6.1.2	PELV systems, including the source and associated circuits (Section 414)	N/A
6.1.3	Double or reinforced insulation i.e. Class II or equivalent equipment and associated circuits (Section 412)	✓
6.1.4	Electrical separation for one item or equipment e.g. shaver supply unit (Section 413)	✓
7.0	CONSUMER UNIT(S) / DISTRIBUTION BOARD(S)	
7.1	Adequacy of access and working space for items of electrical equipment including switchgear (132.12)	✓
7.2	Presence of linked main switch(s) (537.1.4; 537.1.5; 537.1.6)	✓
7.3	Isolators, for every circuit or group of circuits and all items of equipment (537.2)	✓
7.4	Suitability of enclosure(s) for IP and fire ratings (416.2; 421.1.6; 421.1.201)	✓
7.5	Protection against mechanical damage where cables enter equipment (522.8.1; 522.8.11)	✓
7.6	Confirmation that ALL conductor connections are correctly located in terminals and are tight and secure (526.1)	✓
7.7	Avoidance of heating affects where cables enter ferromagnetic enclosures e.g. steel (521.5)	✓
7.8	Selection of correct type and ratings or circuit protective devices for overcurrent and fault protection (411.3.2; 411.4, .5, .6; Sections 432, 433)	✓
7.9	Presence of appropriate circuit charts, warning and other notices:	
7.9.1	Provision of circuit charts/schedules or equivalent forms of information (514.9)	✓
7.9.2	Warning notice of method of isolation where live parts not capable of being isolated by a single device (514.11)	N/A
7.9.3	Periodic inspection and testing notice (514.12.1)	✓
7.9.4	RCD quarterly test notice; where required (514.12.2)	✓
7.9.5	Warning notice of non-standard (mixed) colours of conductors present (514.14)	N/A
7.10	Presence of labels to indicate the purpose of switchgear and protective devices (514.1.1; 514.8)	✓
8.0	CIRCUITS	
8.1	Adequacy of conductors for current-carrying capacity with regard to type and nature of the installation (Section 523)	✓
8.2	Cable installation methods suitable for the location(s) and external influences (Section 522)	✓
8.3	Segregation/separation of Band I (ELV) and Band II (LV) circuits, and electrical and non-electrical services (528)	✓
8.4	Cables correctly erected and supported throughout including escape routes, with protection against abrasion (Sections 521, 522)	✓
8.5	Provision of fire barriers, sealing arrangements where necessary (527.2)	✓
8.6	Non-sheathed cables enclosed throughout in conduit, ducting or trunking (521.10.1; 526.8)	N/A
8.7	Cables concealed under floors, above ceilings or in wall/partitions, adequately protected against damage (522.6.201, .202, .204)	✓
8.8	Conductors correctly identified by colour, lettering or numbering (Section 514)	✓
8.9	Presence, adequacy and correct termination of protective conductors (411.3.1.1; 543.1)	✓
8.10	Cables and conductors correctly connected, enclosed and with no undue mechanical strain (Section 526)	✓
8.11	No basic insulation of a conductor visible outside enclosure (526.8)	✓
8.12	Single-pole devices for switching or protection in line conductors only (132.14.1; 530.3.2)	✓
8.13	Accessories not damaged, securely fixed, correctly connected, suitable for external influences (134.1.1; 512.2; Section 526)	✓

12 SCHEDULE OF ITEMS INSPECTED

Item	Description	Outcome
8.14	Provision of additional protection by RCD not exceeding 30mA:	
8.14.1	Socket-outlets rated at 20 A or less unless exempt (411.3.3)	✓
8.14.2	Mobile equipment with a current rating not exceeding 32 A for use outdoors (411.3.3)	✓
8.14.3	Cables concealed in walls at a depth of less than 50 mm (522.6.202, .203)	✓
8.14.4	Cables concealed in walls/partitions containing metal parts regardless of depth (522.6.202; 522.6.203)	✓
8.15	Presence of appropriate devices for isolation and switching correctly located including:	
8.15.1	Means of switching off for mechanical maintenance (537.3)	✓
8.15.2	Emergency switches (537.4)	✓
8.15.3	Functional switches, for control of parts of the installation and current-using equipment (537.5)	✓
8.15.4	Firefighter's switches (537.6)	N/A
9.0	CURRENT-USING EQUIPMENT (PERMANENTLY CONNECTED)	
9.1	Equipment not damaged, securely fixed and suitable for external influences (134.1.1; 416.2; 512.2)	✓
9.2	Provision of overload and/or undervoltage protection e.g. for rotating machines, if required (Sections 445, 552)	N/A
9.3	Installed to minimise the build-up of heat and restrict the spread of fire (421.1.4; 559.4.1)	✓
9.4	Adequacy of working space. Accessibility to equipment (132.12; 513.1)	✓
10.0	LOCATION(S) CONTAINING A BATH OR SHOWER (SECTION 701)	
10.1	30 mA RCD protection for all LV circuits, equipment suitable for the zones, supplementary bonding (where required) etc.	✓
10.2	Where used as a protective measure, requirements for SELV or PELV met (701.414.4.5)	✓
10.3	Shaver sockets comply with BS EN 61558-2-5 formerly BS 3535 (701.512.3)	✓
10.4	Presence of supplementary bonding conductors, unless not required by BS 7671:2008 (701.415.2)	N/A
10.5	Low voltage (e.g. 230 volt) socket-outlets sited at least 3m from Zone 1 (701.512.3)	✓
10.6	Suitability of equipment for external influences for installed location in terms of IP rating (701.512.2)	✓
10.7	Suitability of accessories and controlgear etc. for a particular zone (701.512.3)	✓
10.8	Suitability of current-using equipment for particular position within the location (701.55)	✓
11.0	OTHER PART 7 SPECIAL INSTALLATIONS OR LOCATIONS List all other special installations or locations present, if any (Record separately the results of particular inspections)	
11.1	N/A	N/A
11.2	N/A	N/A

13 SCHEDULE OF ITEMS TESTED

Item	Description	Outcome
12.1	External earth fault loop impedance, Z_e	✓
12.2	Installation earth electrode resistance, R_a	N/A
12.3	Continuity of protective conductors	✓
12.4	Continuity of ring final circuit conductors	N/A
12.5	Insulation resistance between live conductors	✓
12.6	Insulation resistance between live conductors and earth	✓
12.7	Polarity	✓
12.8	Earth fault loop impedance, Z_s	✓
12.9	Verification of phase sequence	N/A
12.10	Operation of residual current device(s)	✓
12.11	Functional testing of assemblies	✓
12.12	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.

1.4 SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

Designation of consumer unit: **Hager 10 Way Dual RCD** Location: **Hallway** Prospective fault current: **1.15 kA** Type of Wiring O-Other: **N/A**

Circuit number	Circuit designation	Type of wiring	Reference Method	Number of points served	Circuit conductors: csa			Overcurrent protective devices					RCD	Circuit impedances (Ohms)					Insulation resistance		Polarity	Maximum measured earth fault loop impedance Zs	RCD			
					Live mm ²	cpc mm ²	Max disconnect time permitted by BS7671 s	BS(EN)	Type No	Rating A	Capacity kA	Operating current, I _{Δn} mA		Maximum Z _s permitted by BS7671 Ω	Ring final circuits only (measured end to end)			All circuits (one column to be completed)		Live - Live MΩ			Live - Earth MΩ	Disconnection time at I _{Δn} ms	Disconnection time at 5I _{Δn} ms	Test button operation
															r ₁ (Line)	r _n (Neutral)	r ₂ (cpc)	R ₁ +R ₂	R ₂							
															Ω	Ω	Ω	Ω	Ω							
	RCD Module 1	N/A	N/A	N/A	N/A	N/A	N/A	61008	N/A	63	N/A	30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	N/A	44.5	22.7	✓	
1	Cooker	A	B	3	4	1.5	0.4	60898	B	32	6	N/A	1.37	N/A	N/A	N/A	0.29	N/A	>999	> 999	✓	75.20	N/A	N/A	N/A	
2	Sockets - Upstairs back bed	A	B	4	2.5	1.5	0.4	60898	B	16	6	N/A	2.73	N/A	N/A	N/A	0.57	N/A	>999	> 999	✓	74.99	N/A	N/A	N/A	
3	Sockets - Upstairs Front bedroom	A	B	4	2.5	1.5	0.4	60898	B	16	6	N/A	2.73	N/A	N/A	N/A	0.48	N/A	>999	> 999	✓	75.16	N/A	N/A	N/A	
4	Lights - 1st floor & Smokes	A	B	16	1.0	1.0	0.4	60898	B	6	6	N/A	7.28	N/A	N/A	N/A	2.81	N/A	>999	> 999	✓	73.11	N/A	N/A	N/A	
5	Spare	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	RCD Module 2	N/A	N/A	N/A	N/A	N/A	N/A	61008	N/A	63	N/A	30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	N/A	44.4	12.8	✓	
6	Sockets - Kitchen	A	B	7	4	1.5	0.4	60898	B	32	6	N/A	1.37	N/A	N/A	N/A	0.54	N/A	>999	> 999	✓	77.10	N/A	N/A	N/A	
7	Sockets - Ground floor	A	B	6	2.5	1.5	0.4	60898	B	16	6	N/A	2.73	N/A	N/A	N/A	0.79	N/A	>999	> 999	✓	74.25	N/A	N/A	N/A	
8	Sockets - Downstairs bed	A	B	4	2.5	1.5	0.4	60898	B	16	6	N/A	2.73	N/A	N/A	N/A	0.64	N/A	>999	> 999	✓	75.63	N/A	N/A	N/A	
9	lights - Ground floor	A	B	2	1.0	1.0	0.4	60898	B	6	6	N/A	7.28	N/A	N/A	N/A	1.43	N/A	>999	> 999	✓	71.73	N/A	N/A	N/A	
10		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	✓	---	---	---	---	