





# Franklin Electrical

## DOMESTIC ELECTRICAL INSTALLATION CERTIFICATE

(Requirements for Electrical Installations – BS 7671 IET Wiring Regulations)



DETAILS OF THE CLIENT		ADDRESS OF THE INSTALLATION	
Client and address	Jim Skelton 100 Birchfields Rd Manchester	Installation address	4 Tait Mews Stockport
	Postcode: M146PH		Postcode:
DETAILS OF THE INSTALLATION			The Installation Is
Extent of the installation work covered by this certificate	Installation of 17th edition board Installation of ipx4 extractor fan Locate and rectify x2 faults on house ring main		New N/A An addition N/A An alteration <input checked="" type="checkbox"/>
DESIGN, CONSTRUCTION, INSPECTION AND TESTING		* BS 7671 amended to : 2015	
<p>I being the person/s responsible for the design, construction, inspection and testing of the electrical installation (as indicated by my signature) 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, construction, inspection and testing work for which I/we have been responsible is, to the best of my knowledge and belief, in accordance with BS 7671: amended to* except for the departures, if any, detailed as follows:</p> <p>Details of departures from BS 7671: as amended (Regulations 120.3 &amp; 133.5)</p> <p>N/A</p>		<p>The extent of liability of the signatory/signatories is limited to work described above as the subject of this certificate. For the DESIGN, CONSTRUCTION, INSPECTION &amp; TESTING of the installation.</p> <p>Signature  Name (Capitals) NEIL FRANKLIN Date 08/11/2016</p> <p>The results of the inspection and testing reviewed by</p> <p>Signature  Name (Capitals) NEIL FRANKLIN Date 08/11/2016</p>	
PARTICULARS OF THE CONTRACTOR		NEXT INSPECTION	
Trading title	Franklin Electrical	* Interval in terms of years, months, or weeks, as appropriate	
10 Buckland Grove Gee Cross Hyde	Email neilfranklin79@hotmail.com	I RECOMMEND that this installation is further inspected and tested after an interval of not more than * 5 years	
	Web	COMMENTS ON EXISTING INSTALLATION	
Telephone No 07969285192	Postcode Sk145su	Additional information and report notes	
Registration No: 14420 (if applicable)	Branch No: N/A (if applicable)	See periodic report	
		SCHEDULE OF ADDITIONAL RECORDS	
		See attached schedule	
		Risk assessment attached	
		N/A	

SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS				Nature of Supply Parameters				*Characteristics of Primary									
<b>System</b>		<b>Number and Type of Live Conductors</b>		(1) by enquiry (2) by enquiry or by measurement (3) where more than one supply, the higher or highest values				*Other sources of supply to be detailed on attached schedules									
TN-S	N/A	1-phase (2 wire)	✓	1-phase (3 wire)	N/A	Nominal Voltage U (1)		V	Nominal frequency f (1)	50	Hz	BS(EN)	BS 1361 Fuse HBC				
TN-C-S	✓											Type	Type B				
TT	N/A	2-phase (3 wire)	N/A	3-phase (4 wire)	N/A	AC or DC	A/C	Uo (1)	230	V	External earth fault loop impedance Ze (2/3)	0.22	Ω				
* Other	N/A	other	N/A									Rated current	100	A	Short-circuit capacity	33	kA
				Single-phase		Prospective fault current (2/3)		1.04	kA	3-phase		Prospective fault current (2/3)		N/A	kA		


PARTICULARS OF INSTALLATION AT THE ORIGIN				Main Switch/Switch-Fuse/Circuit-Breaker/RCD												
<b>Means of earthing</b>		<b>Details of installation Earth Electrode (where applicable)</b>				Measured Ze			Ω	Type BS(EN)		BS EN 60947-3 Isolator	Voltage rating	240	V	
Distributor's facility	✓	Type: (e.g rod(s), tape, etc)	N/A	Method of measurement:	N/A	Maximum demand: (load)		kVA/Amps		No of poles	2	Rated Current	100	A		
Installation earth electrode	N/A	Electrode resistance to Earth	N/A	Location:	N/A	Number of smoke alarms				Supply conductor material	Copper	*RCD operating current IΔn	N/A	mA		
<b>Earthing conductor</b>		<b>Main protective bonding conductors and bonding of extraneous conductive parts (√)</b>				Protective measures for fault protection		ADS		Supply conductor csa		25	mm <sup>2</sup>	*RCD rated time delay	N/A	ms
Conductor material:	Copper		Conductor material	Copper	Conductor csa	10	Location: (where not obvious)	Bedroom		*RCD operating time (at IΔn)		N/A	ms			
Conductor csa:	16	mm <sup>2</sup>	Continuity check	✓	Gas installation pipes	✓	Water installation pipes	✓	Oil installation pipes	N/A	Structural steel	N/A	To other Specify	N/A	* If RCD main switch	

SCHEDULE OF ITEMS TESTED					
✓	External earth loop impedance, Ze	✓	Polarity	✓	Protection by separation of circuits
N/A	Installation earth electrode resistance, Ra	✓	Earth fault loop impedance Zs	N/A	Other (*Please note below)
✓	Continuity of protective conductors	N/A	Verification of phase sequence	* Further notes for items tested, if applicable	
✓	Continuity of ring final circuit conductors	✓	Operation of residual current device(s)	N/A	
✓	Insulation resistance between live conductors	✓	Functional testing of assemblies		
✓	Insulation resistance between live conductors and earth	✓	Verification of voltage drop		

## SCHEDULE OF INSPECTIONS (for new installation work only)

Item No	DESCRIPTION	OUTCOME	Item No	DESCRIPTION	OUTCOME	Item No	DESCRIPTION	OUTCOME
<b>1.0</b>	<b>DISTRIBUTOR'S / SUPPLY INTAKE EQUIPMENT</b>		<b>6.0</b>	<b>OTHER METHODS OF PROTECTION</b>		<b>8.0</b>	<b>CIRCUITS continued</b>	
1.1	Condition of service cable	✓	6.1	<b>Presence and effectiveness of methods which give both basic and fault protection:</b>		8.3	Segregation/separation of Band I (ELV) and Band II (LV) circuits, and electrical and non-electrical services (528)	✓
1.2	Condition of service head	✓		• SELV system, including the source and associated circuits (Section 414)	✓	8.4	Cables correctly erected and supported throughout including escape routes, with protection against abrasion (Sections 521, 522)	✓
1.3	Condition of distributor's earthing arrangement	✓		• PELV system, including the source and associated circuits (Section 414)	N/A	8.5	Provision of fire barriers, sealing arrangements where necessary (527.2)	✓
1.4	Condition of meter tails - Distributor/Consumer	✓		• Double or reinforced insulation i.e. Class II or equivalent equipment and associated circuits (Section 412)	✓	8.6	Non-sheathed cables enclosed throughout in conduit, ducting or trunking (521.10.1; 526.8)	N/A
1.5	Condition of metering equipment	✓		• Electrical separation for one item of equipment e.g. shaver supply unit (Section 413)	✓	8.7	Cables concealed under floors, above ceilings or in walls/partitions, adequately protected against damage (522.6.201, .202, .204)	✓
1.6	Condition of isolator (where present)	N/A	<b>7.0</b>	<b>CONSUMER UNIT(S) / DISTRIBUTION BOARD(S):</b>		8.8	Conductors correctly identified by colour, lettering or numbering (Section 514)	✓
<b>2.0</b>	<b>PARALLEL OR SWITCHED ALTERNATIVE SOURCES OF SUPPLY</b>		7.1	Adequacy of access and working space for items of electrical equipment including switchgear (132.12)	✓	8.9	Presence, adequacy and correct termination of protective conductors (411.3.1.1; 543.1)	✓
2.1	Adequate arrangements where a generating set operates as a switched alternative to the public supply (551.6)	N/A	7.2	Presence of linked main switch(s) (537.1.4; 537.1.5; 537.1.6)	✓	8.10	Cables and conductors correctly connected, enclosed and with no undue mechanical strain (Section 526)	✓
2.2	Presence & adequacy of earthing & protective bonding arrangements:	N/A	7.3	Isolators, for every circuit or group of circuits and all items of equipment (537.2)	✓	8.11	No basic insulation of a conductor visible outside enclosure (526.8)	✓
<b>3.0</b>	<b>AUTOMATIC DISCONNECTION OF SUPPLY</b>		7.4	Suitability of enclosure(s) for IP and fire ratings (416.2; 421.1.6; 421.1.201)	✓	8.12	Single-pole devices for switching or protection in line conductors only (132.14.1; 530.3.2)	✓
<b>3.1</b>	<b>Presence, adequacy of earthing &amp; protective bonding arrangement</b>		7.5	Protection against mechanical damage where cables enter equipment (522.8.1; 522.8.11)	✓	8.13	Accessories not damaged, securely fixed, correctly connected, suitable for external influences (134.1.1; 512.2; Section 526)	✓
	• Installation earth electrode (where applicable) (542.1.2.3)	N/A	7.6	Confirmation that ALL conductor connections are correctly located in terminals and are tight and secure (526.1)	✓	8.14	<b>Provision of additional protection by RCD not exceeding 30mA:</b>	
	• Earthing conductor and connections, including accessibility (542.3; 543.3.2)	✓	7.7	Avoidance of heating effects where cables enter ferromagnetic enclosures e.g. steel (521.5)	✓		• Socket-outlets rated at 20 A or less, unless exempt (411.3.3)	✓
	• Main protective bonding conductors and connections, including accessibility (411.3.1.2; 543.3.2)	✓	7.8	Selection of correct type and ratings of circuit protective devices for overcurrent and fault protection (411.3.2; 411.4, .5, .6; Sections 432, 433)	✓		• Mobile equipment with a current rating not exceeding 32 A for use outdoors (411.3.3)	✓
	• Provision of safety electrical earthing/bonding labels at all appropriate locations (514.13)514.13)	✓	7.9	<b>Presence of appropriate circuit charts, warning and other notices:</b>			• Cables concealed in walls at a depth of less than 50 mm (522.6.202, .203)	✓
	• RCD(s) provided for fault protection (411.4.9; 411.5.3)	✓		• Provision of circuit charts/schedules or equivalent forms of information (514.9)	✓		• Cables concealed in walls/partitions containing metal parts regardless of depth (522.6.202; 522.6.203)	✓
<b>4.0</b>	<b>BASIC PROTECTION</b>			• Warning notice of method of isolation where live parts not capable of being isolated by a single device (514.11)	N/A	8.15	<b>Presence of appropriate devices for isolation and switching correctly located including:</b>	
4.1	<b>Presence and adequacy of measures to provide basic protection (prevention of contact with live parts) within the installation:</b>			• Periodic inspection and testing notice (514.12.1)	✓		• Means of switching off for mechanical maintenance (537.3)	N/A
	• Insulation of live parts e.g. conductors completely covered with durable insulating material (416.1)	✓		• RCD quarterly test notice; where required (514.12.2)	✓		• Emergency switches (537.4)	N/A
	• Barriers or enclosures e.g. correct IP rating (416.2)	✓		• Warning notice of non-standard (mixed) colours of conductors present (514.14)	✓		• Functional switches, for control of parts of the installation and current-using equipment (537.5)	N/A
<b>5.0</b>	<b>ADDITIONAL PROTECTION</b>		7.10	Presence of labels to indicate the purpose of switchgear and protective devices (514.1.1; 514.8)	✓		• Firefighter's switches (537.6)	N/A
<b>5.1</b>	<b>Presence and effectiveness of additional protection methods:</b>		<b>8.0</b>	<b>CIRCUITS</b>				
	• RCD(s) not exceeding 30 mA operating current (415.1; Part 7), see Item 8.14 of this schedule	✓	8.1	Adequacy of conductors for current-carrying capacity with regard to type and nature of the installation (Section 523)	✓			
	• Supplementary bonding (415.2; Part 7)	N/A	8.2	Cable installation methods suitable for the location(s) and external influences (Section 522)	✓			

**SCHEDULE OF INSPECTIONS (for new installation work only) continued**

Item No	DESCRIPTION	OUTCOME	Item No	DESCRIPTION	OUTCOME	Item No	DESCRIPTION	OUTCOME
9.0	<b>CURRENT-USING EQUIPMENT (PERMANENTLY CONNECTED)</b>		10.0	<b>LOCATION(S) CONTAINING A BATH OR SHOWER (SECTION 701)</b>		11.0	<b>OTHER PART 7 SPECIAL INSTALLATIONS OR LOCATIONS</b>	
9.1	Equipment not damaged, securely fixed and suitable for external influences (134.1.1; 416.2; 512.2)	✓	10.1	30 mA RCD protection for all LV circuits, equipment suitable for the zones, supplementary bonding (where required) etc	✓	11.1	List all other special installations or locations present, if any (Record separately the results of particular inspections applied)	N/A
9.2	Provision of overload and/or undervoltage protection e.g. for rotating machines, if required (Sections 445, 552)	N/A	Inspected By		Date			
9.3	Installed to minimize the build-up of heat and restrict the spread of fire (421.1.4; 559.4.1)	✓	NEIL FRANKLIN		08/11/2016			
9.4	Adequacy of working space. Accessibility to equipment (132.12; 513.1)	✓						

**TEST INSTRUMENTS USED**

Earth fault loop impedance	N/A	Insulation resistance	N/A
Continuity	N/A	RCD	N/A
MFT	1553	Other	N/A

**Details of circuits and/or installed equipment vulnerable to damage when testing and/or remarks:**

N/A

**DISTRIBUTION BOARD DETAILS FOR 4 Tait Mews Stockport**

DB ref:	DB1	Zs at this board (Ω):	0.22	lpf at this board (kA):	1.04	Main switch type BSEN	60947 type C	Rating:	100	<b>Amps</b>	Supply	25	<b>mm<sup>2</sup></b>	Earth:	16	<b>mm<sup>2</sup></b>
Distribution board location:	Bedroom	Phase Sequence Confirmed (where appropriate)	N/A	Supplied from:	Mains	No. Of phases:	Single	Supply protective device type BSEN reference:	BS 1361 Fuse HBC - Type 2				Rating:	100	<b>Amps</b>	

**CIRCUIT DETAILS TEST RESULTS**

Circuit Reference	Circuit Designation	Type of wiring	Reference method	Number of points served	Circuit conductors		Max disconnection time permitted	Over current devices			RCD	Max Zs(Ω) Permitted by BS7671	Continuity Ω					Insulation resistance				Polarity Insert ✓ or X	Measured Zs Ω	RCD			
					Live (mm <sup>2</sup> )	cpc (mm <sup>2</sup> )		Type BS EN	Rating (A)	Short circuit capacity (kA)			IΔn mA	Ring final circuits only (Measured end to end)			All circuits (At least one column to be completed)		Live/Live M Ω	Line/Neutral M Ω	Live/Earth M Ω			Neutral/Earth M Ω	Test button functionality	At IΔn ms	At 5 x IΔn ms
														r <sub>1</sub> (line)	r <sub>n</sub> (neutral)	r <sub>2</sub> (cpc)	(R1 + R2)	R <sub>2</sub>									

1	Shower	A	101	1	6.0	2.5	0.4	60898 type B	32	6	30	1.1	N/A	N/A	N/A	0.22	N/A		N/A	200	200	✓	0.44	✓	21	9		
2	Kitchen Sockets	A	101	7	2.5	1.5	0.4	60898 type B	32	6	30	1.1	0.30	0.30	0.50	0.20	N/A		N/A	200	200	✓	0.42	✓	21	9		
3	Lights	A	101	25	1.0	1.0	0.4	60898 type B	6	6	30	5.87	N/A	N/A	N/A	1.04	N/A		N/A	200	200	✓	1.26	✓	21	9		
4	Cooker	A	101	1	6.0	2.5	0.4	60898 type B	32	6	30	1.1	N/A	N/A	N/A	0.17	N/A		N/A	200	200	✓	0.39	✓	21	9		
5	Sockets	A	101	9	2.5	1.5	0.4	60898 type B	32	6	30	1.1	0.59	0.59	0.92	0.37	N/A		N/A	200	200	✓	0.59	✓	21	9		
6	Alarm/door entry	A	101	2	1.0	1.0	0.4	60898 type B	6	6	30	5.87	N/A	N/A	N/A	0.31	N/A		N/A	200	200	✓	0.53	✓	21	9		
7	Door bell	A	101	1	1.0	1.0	0.4	60898 type B	6	6	30	5.87	N/A	N/A	N/A	N/A	N/A		N/A	200	200	✓	N/A	✓	21	9		
8																												
9																												
10																												



CODES FOR TYPES OF WIRING							
A	B	C	D	E	F	G	
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	Reference Methods are methods of installation for which the current-carrying capacity has been determined by test or calculation

## NOTES FOR RECIPIENT

**THIS CERTIFICATE IS A VALUABLE DOCUMENT AND SHOULD BE RETAINED FOR FUTURE REFERENCE**

This safety certificate has been issued to confirm that the electrical installation work to which it relates has been designed, constructed and inspected and tested in accordance with British Standard 7671 (The IET Wiring Regulations).

You should have received an original Certificate and the contractor should have retained a duplicate Certificate. If you were the person ordering the work, but not the owner of the installation, you should pass this certificate, or a full copy of it including the schedules immediately to the user.

The original certificate should be retained in a safe place and be shown to any 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 owner that the electrical installation complied with the requirements of British Standard 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 health and safety documentations.

For safety reasons, the electrical installation will need to be inspected at appropriate intervals by a competent person. The maximum time interval recommended before the next inspection is stated in the certificate under "Next Inspection."

This certificate is intended to be issued only for a new electrical installation or for new work associated with an alteration or addition to a existing installation. It should not have been issued for the inspection of an existing electrical installation. An "Electrical Installation Condition Report" should be issued for such an inspection.

The certificate is only valid if a Schedule of Inspection of Test Results is attached.