



Date 01/04/2022

Certificate Serial No/Ref:

18 Holt Street

# Oakworth Electrical Electrical Installation Certificate



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

## DETAILS OF THE CLIENT

Client/Address Jeff Harper , 18 Holt St Hartlepool TS24 7QL England

## DETAILS OF THE INSTALLATION

Address: 18 Holt St Hartlepool TS24 7QL England

New 

Extent of the installation covered by this Certificate:

Rewire of the property (Cables surface mounted with fire protection clips installed)

An Addition  N/AAn Alteration  N/A

## DESIGN

\* BS 7671 amended to : 2018

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 knowledge and belief, in accordance with BS 7671 amended to\* except for the departures, if any, detailed as follows:

Details of departures from BS 7671 \*as amended (Regulations 120.3, 133.1.3, 133.5) N/A

Details of permitted exceptions (Regulation 411.3.3). Where appropriate a suitable risk assessment should be attached to this certificate

N/A

Risk assessment attached

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	01/04/2022	Name (CAPITALS)	GRANT HAWKINS	Designer 1
Signature		Date	01/04/2022	Name (CAPITALS)	N/A	Designer 2 **

## CONSTRUCTION

\* BS 7671 amended to : 2018

I being the person(s) responsible for the construction 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 construction, hereby Certify that the construction work for which I 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:

Details of departures from BS 7671 \*as amended (Regulations 120.3, 133.1.3, 133.5) N/A

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	01/04/2022	Name (CAPITALS)	GRANT HAWKINS	Constructor
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## INSPECTION AND TESTING

\* BS 7671 amended to : 2018

I being the person(s) responsible for the inspection and testing 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 inspection and testing, hereby Certify that the inspection and testing work for which I have been responsible is, to the best of my knowledge and belief, in accordance with BS 7671 as amended to\* except for the departures, if any, detailed as follows:

Details of departures from BS 7671 \*as amended (Regulations 120.3, 133.1.3, 133.5) N/A

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

For the INSPECTION AND TESTING of the installation:

Signature		Date	01/04/2022	Name (CAPITALS)	GRANT HAWKINS	Inspector
Reviewed by						
Signature		Date	01/04/2022	Name (CAPITALS)	GRANT HASKINS	Qualified Supervisor

## DESIGN, CONSTRUCTION, INSPECTION AND TESTING

\* This box is 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 inspection and testing work for which I have been responsible is, to the best of my knowledge and belief, in accordance with BS 7671 as amended to\*\* except for the departures, if any, detailed as follows:

\*\*BS 7671 amended to : 2018

Details of departures from BS 7671, as amended (Regulations 120.3 & 133.5)

N/A

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

<b>Signature</b>		<b>Date</b>	01/04/2022	<b>Name (CAPITALS)</b>	GRANT HAWKINS	<b>INSPECTOR</b>
<b>Reviewed by</b>						
<b>Signature</b>		<b>Date</b>	01/04/2022	<b>Name (CAPITALS)</b>	GRANT HAWKINS	<b>Qualified Supervisor</b>

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

DESIGN (1)  
Organisation

Oakworth Electrical

**Address:**

33 Hillmorton Road  
Ingleby Barwick  
Stockton On Tees  
TS17 5BH

**Registration No. (Where appropriate)**

51178

**Branch number (if applicable)**

DESIGN (2)  
Organisation

N/A

**Address:**

N/A

**Registration No. (Where appropriate)**

N/A

**Branch number (if applicable)**

N/A

CONSTRUCTION  
Organisation

Oakworth Electrical

**Address:**

33 Hillmorton Road  
Ingleby Barwick  
Stockton On Tees  
TS17 5BH

**Registration No. (Where appropriate)**

51178

**Branch number (if applicable)**

INSPECTION & TESTING  
Organisation

Oakworth Electrical

**Address:**

33 Hillmorton Road  
Ingleby Barwick  
Stockton On Tees  
TS17 5BH

**Registration No. (Where appropriate)**

51178

**Branch number (if applicable)**

## SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS

System Types		Number and types of live conductors				Nature of supply parameters		
TN-S	N/A	a.c.	<input checked="" type="checkbox"/>	d.c.	N/A	Nominal voltage U/Uo	230	<b>Volts</b>
TN-C-S	<input checked="" type="checkbox"/>	1-Phase 2 wire	<input checked="" type="checkbox"/>	2 wire	N/A	Nominal frequency	50	<b>Hz</b>
TN-C	N/A	2-Phase 3 wire	N/A	3 wire	N/A	Prospective fault current	0.79	<b>kA</b>
TT	N/A	3-Phase 3 wire	N/A	3-Phase 4 wire	<input checked="" type="checkbox"/>	External Ze	0.22	<b>Ohms</b>
IT	N/A	Other		Confirmation of supply polarity	<input checked="" type="checkbox"/>	Number of supplies	1	

CHARACTERISTICS OF THE SUPPLY OVERCURRENT PROTECTIVE DEVICE							
Type BS/EN	Lim	Rated current	Lim	A	Short circuit capacity	Lim	kA

PARTICULARS OF INSTALLATION AT THE ORIGIN			
<b>Means of earthing</b>		<b>Details of installation Earth Electrode</b> (where applicable)	
Supplier's facility	✓	Type: (e.g. rods, tape etc)	N/A
Installation earth electrode	N/A	Electrode resistance to Earth	N/A Ω
Maximum Demand (Load)	100	Amps	Protection under normal conditions
			ADS

Main Switch/Switch-Fuse/Circuit-Breaker/RCD				Supply conductors	
Type BSEN	60947 type B	No of poles	2	Fuse/Device rating	230 V
				Current rating	100 A
<b>If RCD main switch</b>				Conductor material	
RCD IΔn operating current	N/A	mA	RCD rated time delay	N/A	ms
			RCD at IΔn operating time	N/A	ms
				Conductor csa	25 mm <sup>2</sup>

Earthing conductors					
Conductor material	Copper	Conductor csa	16	mm <sup>2</sup>	Continuity check
					✓ (✓) OK
<b>Main bonding conductors</b> to extraneous-conductive-parts					
Conductor material	Copper	Conductor csa	10	mm <sup>2</sup>	Continuity check
					✓ (✓) OK
<b>Bonding of extraneous conductive parts (✓)</b>					
Water Installation pipes	✓	Gas Installation pipes	✓	Oil Installation pipes	N/A
				Structural steel	N/A
				Lightning protection	N/A
				Other	N/A
					List in report notes

COMMENTS ON THE EXISTING INSTALLATION
N/A

NEXT INSPECTION
I/We the designer(s), recommend that this installation is further inspected and tested after an interval of not more than 5 years (Rental)

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

Item No	DESCRIPTION	OUTCOME	Item No	DESCRIPTION	OUTCOME
<b>1.0</b>	<b>DISTRIBUTOR'S / SUPPLY INTAKE EQUIPMENT</b> (VISUAL INSPECTION ONLY)			<b>CONSUMER UNIT(S) / DISTRIBUTION BOARD(S) continued</b>	
1.1	Service cable	✓	7.6	Protection against mechanical damage where cables enter equipment (522.8.1; 522.8.5; 522.8.11)	✓
1.2	Service head	✓	7.7	Confirmation that ALL conductor connections are correctly located in terminals and are tight and secure (526.1)	✓
1.3	Earthing arrangement	✓	7.8	Avoidance of heating effects where cables enter ferromagnetic enclosures e.g. steel (521.5)	✓
1.4	Meter tails	✓	7.9	Selection of correct type and ratings of circuit protective devices for overcurrent and fault protection (411.3.2; 411.4, 411.5, 411.6; Sections 432, 433; 537.3.1.1)	✓
1.5	Metering equipment	✓	7.10	<b>Presence of appropriate circuit charts, warning and other notices:</b>	
1.6	Isolator (where present)	✓		• Provision of circuit charts/schedules or equivalent forms of information (514.9)	✓
2.0	<b>PARALLEL OR SWITCHED ALTERNATIVE SOURCES OF SUPPLY</b>			• Warning notice of method of isolation where live parts not capable of being isolated by a single device (514.11)	N/A
2.1	Adequate arrangements where a generating set operates as a switched alternative to the public supply (551.6)	N/A		• Periodic inspection and testing notice (514.12.1)	✓
2.2	Adequate arrangements where a generating set operates in parallel with the public supply (551.7)	N/A		• RCD six-monthly test notice; where required (514.12.2)	✓
3.0	<b>AUTOMATIC DISCONNECTION OF SUPPLY</b>			• AFDD six-monthly test notice; where required	N/A
3.1	<b>Presence, adequacy of earthing &amp; protective bonding arrangements</b>			• Warning notice of non-standard (mixed) colours of conductors present (514.14)	N/A
	• Distributor's earthing arrangement (542.1.2.1; 542.1.2)	✓	7.11	Presence of labels to indicate the purpose of switchgear and protective devices (514.1.1; 514.8)	✓
	• Installation earth electrode (where applicable) (542.1.2.3)	N/A	8.0	<b>CIRCUITS</b>	
	• Earthing conductor and connections, including accessibility (542.3; 543.3.2)	✓	8.1	Adequacy of conductors for current-carrying capacity with regard to type and nature of the installation (Section 523)	✓
	• Main protective bonding conductors and connections, including accessibility (411.3.1.2; 543.3.2; 544.1)	✓	8.2	Cable installation methods suitable for the location(s) and external influences (Section 522)	✓
	• Provision of safety electrical earthing/bonding labels at all appropriate locations (514.13)	✓	8.3	Segregation/separation of Band I (ELV) and Band II (LV) circuits, and electrical and non-electrical services (528)	✓
	• RCD(s) provided for fault protection (411.4.204; 411.5.3)	N/A	8.4	Cables correctly erected and supported throughout including escape routes, with protection against abrasion (Sections 521, 522)	✓
4.0	<b>BASIC PROTECTION</b>		8.5	Provision of fire barriers, sealing arrangements where necessary (527.2)	✓
4.1	<b>Presence and adequacy of measures to provide basic protection (prevention of contact with live parts) within the installation:</b>		8.6	Non-sheathed cables enclosed throughout in conduit, ducting or trunking (521.10.1; 526.8)	✓
	• Insulation of live parts e.g. conductors completely covered with durable insulating material (416.1)	✓	8.7	Cables concealed under floors, above ceilings or in walls/partitions, adequately protected against damage (522.6.201, .202, .204)	✓
	• Barriers or enclosures e.g. correct IP rating (416.2)	✓	8.8	Conductors correctly identified by colour, lettering or numbering (Section 514)	✓
5.0	<b>ADDITIONAL PROTECTION</b>		8.9	Presence, adequacy and correct termination of protective conductors (411.3.1.1; 543.1)	✓
5.1	<b>Presence and effectiveness of additional protection methods:</b>		8.10	Cables and conductors correctly connected, enclosed and with no undue mechanical strain (Section 526)	✓
	• RCD(s) not exceeding 30 mA operating current (415.1; Part 7), see Item 8.14 of this schedule	✓	8.11	No basic insulation of a conductor visible outside enclosure (526.8)	✓
	• Supplementary bonding (415.2; Part 7)	N/A	8.12	Single-pole devices for switching or protection in line conductors only (132.14.1; 530.3.3; 643.6)	✓
6.0	<b>OTHER METHODS OF PROTECTION</b>		8.13	Accessories not damaged, securely fixed, correctly connected, suitable for external influences (134.1.1; 512.2; Section 526)	✓
6.1	<b>Presence and effectiveness of methods which give both basic and fault protection:</b>		8.14	<b>Provision of additional protection by RCD not exceeding 30mA:</b>	
	• SELV system, including the source and associated circuits (Section 414)	N/A		• Socket-outlets rated at 32 A or less, unless exempt (411.3.3)	✓
	• PELV system, including the source and associated circuits (Section 414)	N/A		• Supplies for mobile equipment with a current rating not exceeding 32 A for use outdoors (411.3.3)	✓
	• Double or reinforced insulation i.e. Class II or equivalent equipment and associated circuits (Section 412)	N/A		• Cables concealed in walls at a depth of less than 50 mm (522.6.202, .203)	✓
	• Electrical separation for one item of equipment e.g. shaver supply unit (Section 413)	N/A		• Cables concealed in walls/partitions containing metal parts regardless of depth (522.6.202; 522.6.203)	✓
7.0	<b>CONSUMER UNIT(S) / DISTRIBUTION BOARD(S):</b>			• Final circuits supplying luminaires within domestic (household) premises (411.3.4)	✓
7.1	Adequacy of access and working space for items of electrical equipment including switchgear (132.12)	✓	8.15	<b>Presence of appropriate devices for isolation and switching correctly located including:</b>	
7.2	Components are suitable according to assembly manufacturer's instructions or literature (536.4.203)	✓		• Means of switching off for mechanical maintenance (Section 464; 537.3.2)	✓
7.3	Presence of linked main switch(es) (462.1.201)	✓		• Emergency switching (465.1; 537.3.3)	N/A
7.4	Isolators, for every circuit or group of circuits and all items of equipment (462.2)	✓		• Functional switching, for control of parts of the installation and current-using equipment (463.1; 537.3.1)	✓
7.5	Suitability of enclosure(s) for IP and fire ratings (416.2; 421.1.6; 421.1.201; 526.5)	✓		• Firefighter's switches (537.4)	N/A

✓ To indicate that an inspection or test has been carried out and the result is satisfactory
 N/A To indicate the inspection or test is not applicable to a particular item

NOTE : This form is suitable for many types of smaller installation, not exclusively domestic. Electrical separation (see Section 413 and Regulation 418.3)

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

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>	
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	✓
9.2	Provision of overload and/or undervoltage protection e.g. for rotating machines, if required (Sections 445, 552)	✓	11.0	<b>OTHER PART 7 SPECIAL INSTALLATIONS OR LOCATIONS</b>	
9.3	Installed to minimize the build-up of heat and restrict the spread of fire (421.1.4; 559.4.1)	✓	11.1	List all other special installations or locations present, if any. (Record separately the results of particular inspections applied)	N/A
9.4	Adequacy of working space. Accessibility to equipment (132.12; 513.1)	✓			
Inspected By			Date		
Grant Hawkins			01/04/2022		
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> </div>					

## SCHEDULE OF ADDITIONAL RECORDS (See attached schedule)

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

**Page No(s)**    N/A

### ESSENTIAL TESTS

### TEST INSTRUMENTS USED

✓	External earth loop impedance, Ze	N/A	Insulation of non-conducting floors or walls	MFT
N/A	Installation earth electrode resistance, Ra	✓	Earth fault loop impedance Zs	915
✓	Continuity of protective conductors	N/A	Verification of phase sequence	Earth fault loop impedance
✓	Continuity of ring circuit conductors	✓	Operation of residual current devices	N/A
✓	Insulation resistance between live conductors	✓	Functional testing of assemblies	Insulation resistance
✓	Insulation resistance between live conductors and earth	✓	Verification of voltage drop	N/A
N/A	Protection by separation of circuits			Continuity
✓	Basic protection against direct contact by barrier or enclosure provided during erection			N/A
✓	Polarity			RCD
				N/A
				Other
				N/A

**DISTRIBUTION BOARD DETAILS FOR 18 Holt St Hartlepool TS24 7QL England**

DB ref:	DB1	Zs at this board (Ω):	0.22	lpf at this board (kA):	0.79	Main switch type BSEN	60947	Rating:	100	<b>Amps</b>	Supply	25	<b>mm<sup>2</sup></b>	Earth:	16	<b>mm<sup>2</sup></b>
Distribution board location:	Hall	Phase Sequence Confirmed (where appropriate)	N/A	Supplied from:	Mains	No. Of phases:	Single	Supply protective device type BSEN reference:	Lim	Rating:	Lim	<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	Protective Device					Continuity Ω					Insulation Resistance				Maximum measured Zs Ω	RCD		AFDD		
					Live (mm <sup>2</sup> )	cpc (mm <sup>2</sup> )		Type BS (EN)	Rating (A)	RCD IΔn mA	Short circuit capacity (kA)	Max permitted Zs (Ω*)	Ring final circuits only (measured end to end)			All circuits (At least 1 column to be completed)		Insulation resistance test voltage V	Live - Live	Live - Neutral	Live - Earth		Neutral - Earth	Polarity		Disconnection time (ms)	RCD test button/ functionality
													r <sub>1</sub>	r <sub>n</sub>	r <sub>2</sub>	R <sub>1+R2</sub>	R <sub>2</sub>										

1	Cooker	A	B	1	6	2.5	0.4	61009 type B	32	30	6	1.10	N/A	N/A	N/A	0.21	N/A	500	N/A	>200	>200	>200	✓	0.43	19.6	17.7	✓	N/A	
2	Sockets general	A	B	12	2.5	1.5	0.4	61009 type B	32	30	6	1.10	0.38	0.38	0.62	0.30	N/A	500	N/A	>200	>200	>200	✓	0.52	21.3	17.8	✓	N/A	
3	Kitchen radial + Toilet spur	A	B	1	2.5	1.5	0.4	61009 type B	16	30	6	2.18	N/A	N/A	N/A	0.46	N/A	500	N/A	>200	>200	>200	✓	0.68	23.5	18.3	✓	N/A	
4	Down lighting	A	B	5	1.0	1.0	0.4	61009 type B	6	30	6	5.82	N/A	N/A	N/A	0.74	N/A	500	N/A	>200	>200	>200	✓	0.96	18.7	15.6	✓	N/A	
5	Up lighting	A	B	4	1.0	1.0	0.4	61009 type B	6	30	6	5.82	N/A	N/A	N/A	0.44	N/A	500	N/A	>200	>200	>200	✓	0.66	18.7	16.6	✓	N/A	

\* Where the maximum permitted earth fault loop impedance value stated is taken at from a source other than the tabulated values given in Chapter 41 of BS 7671 , state the source of the data



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

N/A

## 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).

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 skilled person or persons, competent in such work. The maximum time interval recommended before the next inspection is stated in the certificate under "Next Inspection."

Notes for the person producing the certificate:

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 where new circuits have been introduced, or the replacement of a consumer unit/distribution board. It should not have been issued for the inspection of an existing electrical installation. An Electrical Installation Condition Report should be used in this case.

The certificate is only valid if a Schedule of Inspection of test results is attached.

#### 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

# Electrical Test Instrument Calibration Certificate Copy

## CERTIFICATE OF CALIBRATION

Issued By Britannia Test & Measurement Ltd  
Date of Issue 21 December 2021

Certificate Number  
BTM7454

Page 1 of 4 Pages



Test & Measurement

Britannia Test & Measurement Ltd  
3K Brighthouse Brighthouse Village  
Brighthouse Road  
Middlesbrough  
TS2 1RT

Approved Signatory

F Fielding  C Trattles  P Trattles

Customer : National Lighting  
5 Portrack Trade Park, Cheltenham Road  
Portrack Lane TS18 2AD

Date Received :

Instrument - System ID : ID12810  
Description : Multifunction Tester  
Manufacturer : Megger  
Model Number : MFT1720  
Serial Number : 101306657  
Procedure Version : 1.00

### Environmental Conditions

Temperature : 20°C +/- 1°C  
Relative Humidity : 50% +/- 10%

Mains Voltage : 240V +/- 10V  
Mains Frequency : 50Hz +/- 1Hz

### Comments

Instrument was allowed to stabilise for at least 12 hours before calibration.  
Instrument calibrated with test lead set supplied.

### Traceability Information

Instrument description	Serial number	Certificate number	Cal. Date	Cal. Period
3200A Electrical Test Calibrator (STD)	M1384F15	44313	13/08/2021	52

Calibrated By : P Trattles

Date of Calibration : 21 December 2021

This certificate provides traceability of measurement to recognised National Standards, and to the units of measurement realised at the National Physical Laboratory or other recognised National Standards laboratories.  
Copyright of this certificate is owned by the issuing laboratory and may not be reproduced except with the prior written approval of the issuing laboratory.  
This certificate complies with the requirements of BS EN ISO 10012:2003.

### Oakworth Electrical

Certifies this certificate is a true likeness of the original calibration certificate for the test instrument(s) used to assess electrical compliance for the installation