ATEX SOLUTIONS LIMITED

DSEAR & ATEX SPECIALISTS

EXPLOSIVE & HAZARDOUS AREA SPECIALISTS

ELECTRICAL SERVICES

INTRINSICALLY SAFE
AND
'FLAMEPROOF'
INSTALLATIONS

ATEX SOLUTIONS LIMITED

Registered Office
Hillhouse International Thornton-Cleveleys Lancashire FY5 4QD Telephone 01253 855898
Fax: 01253 539000 email info@atexsolutions.co.uk www.atexsolutions.co.uk

ATEX SOLUTIONS LIMITED

ATEX SOLUTIONS LIMITED have years of experience in all aspects of design, maintenance, installation, inspection and testing, ensuring compliance to the various regulations. A measure of our quality service is apparent with the high profile companies with which we deal.

- 'Total Care' package or Individual inspection requirements
- Dangerous Substances and Explosive Atmosphere Regulations 2002 (DSEAR) Compliance assessments
- 'Area Classification'
- Design, Approval, Installation and Maintenance of 'Hazardous Area' equipment
- 'Approval' of Intrinsically Safe System(s) prior/during/post design.
- Advice, support and specialist knowledge of 'Selection and Maintenance of Electrical Equipment For Use In A Potentially Explosive Atmosphere'
- Inspection and Testing of 'Hazardous Area' equipment
- 'Tailored' training courses in 'Hazardous Areas' available.
- Portable/Transportable (certified and non-certified) Inspection and Testing
- Industrial Electrical/Instrumentation design, installation, maintenance, test and Inspection.
- 'General' Inspection and Testing
    - Portable Appliance Testing (P.A.T.)
    - Microwave Ovens
    - Fixed Wiring
    - Electrical Thermographic Imaging
    - Emergency Lighting
    - Fire Alarm Systems

Current systems used have been developed over a number of years and accepted by Factory Inspectors and Responsible Business Management

Under continuous improvement these systems are constantly monitored and upgraded where necessary. Full reports, history of tests carried out, paper copy and/or PC format, (and certificates for portables) are supplied and meet *ALL* the requirements for electrical testing.

DSEAR Compliance

The Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) are concerned with protection against risks from fire, explosion and similar events arising from dangerous substances used or present in the workplace. They set minimum requirements for the protection of workers from fire and explosion risks related to dangerous substances and potentially explosive atmospheres. The Regulations apply to employers and the self-employed at most workplaces in Great Britain where a dangerous substance is present or could be present.

The Dangerous Substances and Explosive Atmospheres Regulations 20021 (DSEAR) were made under the Health and Safety at Work etc Act 19748 (HSW Act) and their main provisions came into force on 9 December 2002. The Regulations apply to workplaces (as defined in regulation 2) in Great Britain. These workplaces, which cover most sectors of industry and commerce, are also subject to the HSW Act. A limited number of requirements concern explosive atmospheres and these came into force on 30 June 2003, their application is subject to transitional arrangements.

The Regulations implement two European Directives: the safety aspects of the Chemical Agents Directive(a) 98/24/EC9 (CAD) and the Explosive Atmospheres Directive 99/92/EC10 (ATEX 137) requiring similar legislation throughout the European Union (EU) on work involving hazardous chemical agents and explosive atmospheres.

The primary purpose of DSEAR is to protect the safety of workers and others who may be at risk from dangerous substances that can cause a fire, explosion or similar energy-releasing event, such as a runaway exothermic reaction.

Atex Solutions limited will undertake an assessment of current practices, processes and procedures and produce reports on compliance to the regulations.

The likely presence of explosive atmospheres and the need for hazardous area classification

Area Classification

Gases, vapours, mists and dusts can give rise to explosive atmospheres. 'Hazardous area classification', as required by DSEAR regulation 7, is intended to identify places where, because of the potential for an explosive atmosphere, controls over sources of ignition are required. The results of the classification are then used to control the equipment that may be used, or the work activities that may be carried out, in these areas so as to prevent ignition.

Employers should carry out hazardous area classification as an integral part of the risk assessment so as to identify places where controls over ignition sources are needed and those places where they are not. Schedule 2 of the DSEAR regulations, sets out definitions of the zones to be used when classifying hazardous places. These definitions recognise that, in many cases, explosive atmospheres will not be present constantly, and that the chance of a fire or explosion depends on the likelihood of an explosive atmosphere occurring at the same time as an ignition source becomes active.

Schedule 2 defines a place where an explosive atmosphere may occur in such quantities as to require special precautions to protect the health and safety of workers as hazardous. A place where an explosive atmosphere is not expected to occur in such quantities as to require such special precautions is deemed to be non-hazardous. 'Special precautions' should be taken to mean precautions to control potential ignition sources within a hazardous area, in particular in relation to the construction, installation and use of equipment.

The term 'not expected to occur in such quantities' means that employers should consider the likelihood of releases of explosive atmospheres as well as the potential quantity of such releases when considering area classification. So if a release is extremely unlikely to occur and/or if the quantities released are small, it may not be necessary to classify the area as hazardous.

For example, if a dangerous substance is being carried through a seamless pipe, and that pipe has been properly installed and maintained, it is extremely unlikely that the substance will be released. Thus an explosive atmosphere would not be expected to occur from this source and the area surrounding the pipe would be non-hazardous.

A spillage from a small bottle of solvent would release so little flammable material that no special precautions for the selection of equipment are needed and therefore the area would not be classified as hazardous. However, after such a spillage it would be necessary to control obvious ignition sources (eg smoking) during clean up and disposal of the liquid. In determining when hazardous area classification is not necessary in respect to a small quantity of dangerous substance the actual circumstances of use and any specific industry guidance should be taken into account.

Likewise, dangerous substance in small pre-packaged containers for sale, display, etc in retail premises would not normally require the area to be classified as hazardous. As above, however, procedures to clean up and dispose of any spillage/release and control ignition sources in the event of such a release would be needed.

In order to systematically identify hazardous and non-hazardous areas, and then to subsequently assign zones to those areas classified as hazardous, an assessment should be carried out taking into account such matters as:

- the hazardous properties of the dangerous substances involved
- the amount of dangerous substances involved
- the work processes, and their interactions, including any cleaning, repair or maintenance activities that will be carried out
- the temperatures and pressures at which the dangerous substances will be handled
- the containment system and controls provided to prevent liquids, gases, vapours or dusts escaping into the general atmosphere of the workplace
- any explosive atmosphere formed within an enclosed plant or storage vessel
- any measures provided to ensure that any explosive atmosphere does not persist for an extended time, eg ventilation.

Taken together these factors are the starting point for hazardous area classification, and should allow for the identification of any zoned areas. The following paragraphs give further information on issues and factors that employers will need to consider as a part of an assessment of risks from explosive atmospheres.

Atex Solutions limited can undertake an area classification using current standards (BSEN60079-10-x) and produce appropriate documentation forming the ‘Explosion Protection Documentation’ as referenced within the regulations.

Portable Equipment

Duties under the law

There are legal duties relating to the use and maintenance of electrical equipment and these are contained in the 'Electricity at Work Regulations 1989 (EAWR). These apply to all work activities and places requirements on employers, self - employed and employees, designed to control the risks which may arise from the use of electricity. The precautions taken should be appropriate to the risk rather than having precautions imposed that may not be relevant to a particular work activity.

Regulation 4(2) requires that '*as may be necessary to prevent danger, all systems shall be maintained so as to prevent so far as is reasonably practicable, such danger'.* This requirement covers all items of electrical equipment including *fixed, portable* and *transportable* equipment.

The testing and identification of portable equipment with particular reference to hazardous areas is critical. Thus ensuring compliance with various regulations and continued safe use within a potentially explosive atmosphere.

Portable and Transportable definition

This is applied to equipment that is not part of a fixed installation but is, or is intended to be, connected to a supply source. All items that are either hand held or hand operated whilst connected to a supply.

The supply is that voltage which can result in a risk of fatal electric shock to any person i.e. above 50V ac or 120V dc.

Extension leads, plugs and sockets and cord sets which supply electrical equipment are classed as portable apparatus.

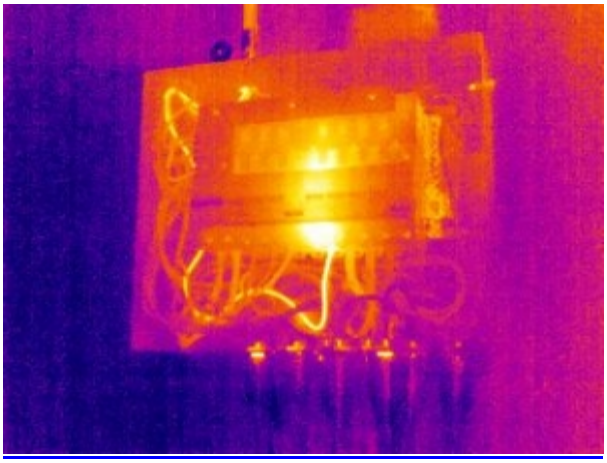
Examples would be: Tools and Extension leads in the construction industry (High risk); Grinders and hand lamps in general manufacturing (Medium risk); and Floor Cleaners and PC equipment etc. in office areas (Low risk).

The risks can be managed and controlled by the setting up of an appropriate maintenance and inspection system. '*The greatest overall reduction in risk will take place when the maintenance system is first put into place'*

*** NOTE - EAWR 1989 Reg. 4(4), 5, 8 - 16; Reg. 29 ("Absolute Compliance")**
It shall be a defence for any person to prove that they have took all reasonable steps and exercised due diligence to avoid commission of that offence.

Thermographic Imaging

Electricity at Work Regulations Act 1989, Health & Safety at Work Act 1974 and BS 7671 (IEE Wiring Regulations 17th Edition as amended) suggest that electrical infrastructure be regularly maintained and tested to ensure compliance with safety guidelines. Performing a thermographic inspection will highlight problems with electrical infrastructure under load during the testing process as these areas will manifest as anomalous temperatures shown in the live image on the thermal imaging camera.



Thermographic image of consumer unit showing 'hot spot'

Incentive to inspect

By producing a detailed report will help demonstrate that reasonable steps have been taken to ensure the electrical infrastructure is of reasonable integrity. Additionally, it may satisfy your insurance company requirements for the fire prevention in electrical systems related scenarios.

As the market is unregulated diligence is required when choosing the inspection company to undertake such work

Atex Solutions Limited will undertake thermographic imaging on equipment identified and produce clear and precise images along with a compliance report on completion.

Where further non-compliance action is required this will be advised within the written report.

(Any equipment found to be 'unsafe' will be brought to the attention of the 'Responsible Person' at the time of inspection)

Emergency Lighting and Fire Alarm

Both BS 5266 and European draft standard prEN 50172 define detailed requirements for inspection and testing of emergency lighting systems at regular intervals. Emergency lighting testing requirements are detailed in ICEL 1008 and the general schedule of requirements is shown as follows:

Daily:

- Visually check that all maintained lamps are operating and that all system healthy indicators on Central Power Supply Systems (sometimes called Central Battery Systems) are illuminated
- Check that any recorded system fault is given urgent attention and record all corrective actions in the logbook provided.

Monthly:

- Check all luminaires and other emergency lighting equipment are in a good condition, all lamps and light controllers are clean, undamaged and not blackened.
- Briefly test all emergency lighting equipment by simulating a failure of the normal lighting supply. The test should not exceed a quarter of the equipment rated duration.
- Check that all equipment functions correctly.
- Check that, upon restoring the mains supply, all supply healthy indicators are again illuminated.

Six Monthly:

- Carry out the inspection and testing as described in the monthly test schedule, but conduct a test of the equipment for one third of its rated duration.

Annually:

- A full system test should be conducted by a competent service engineer including a full rated duration test of the system.
- Compliance of the installation and system with the requirements of BS 5266 should be considered and documented.

The results of all testing and any necessary corrective action will be recorded in a log record held on site and shall be made available, if required, for inspection by any authorised person. (Insurance cover of premises may also be affected if emergency lighting systems are not correctly maintained)

Emergency Lighting and Fire Alarm *(Cont..)*

The majority of occupiers of premises do not understand the operation of their emergency lighting systems.

If occupiers realise their obligations to test and maintain emergency lighting at all, most are only concerned to maintain the systems to correctly fulfil their statutory obligations. Sub-contracting the task of maintaining systems is therefore an attractive proposition to many occupiers and landlords.

Although some central battery systems may need to be maintained by specialists, trained, competent electrical contractors can maintain many emergency lighting systems.

Routine maintenance contracts can be good business if well managed but it is necessary to follow the schedules of routine maintenance described in BS 5266.

Atex Solutions Limited will produce reports on completion of periodic Inspection and testing.

Fixed Wiring Electrical Inspection and Testing

The EAWR Regulations state that all electrical installations, or supplies, should be initially and then periodically tested to ensure safe working conditions. Inspection is necessary because all electrical installations deteriorate due to a number of factors such as wear, tear, corrosion, damage, excessive loading, ageing and environmental conditions.

Legislation requires that certain electrical installations be maintained in a safe condition and therefore must be periodically inspected and tested.

Licensing authorities, public bodies, insurance companies and others may require periodic inspection and testing of electrical installations.

Additionally periodic inspection and testing should be considered to verify compliance with IEE Wiring Regulations (BS7671), to ensure safety of installation on change of ownership, on change of premises use or after any electrical alterations to the original installation.

Examples of the types of inspections that should be carried out on regular bases are:

1 Earth Fault Loop Impedance Testing

2 Continuity of Protective Conductors

3 Residual Current Device Operation

4 Insulation Testing

5 Devices For Isolation and Switching

6 Lightning Protection

7 Static Earthing

Equipment in a Hazardous Environment

In the many industrial processes where flammable materials are used or stored, any leak or spillage may give rise to an explosive atmosphere. Precautions therefore must be taken to protect plant and personnel and to ensure that this atmosphere cannot be ignited. The areas at risk are known as '*Hazardous Areas'* and materials commonly used that create these areas include:

Explosives, Crude Oil (and its derivatives); Gases; Alcohol's; Synthetic Processes; Flour; Starch; Grain; Fibres; Carbon Dusts; Metal Dusts.

To enable electrical equipment to be used safely in these areas or environments eight different techniques of explosion protection have been developed. National or international standards govern how the equipment should be manufactured and in which areas they may be used. Examples of the different protection standards are:

- **Intrinsically Safe Ex i**
- **Protection by enclosure Ex t (Dust)**
- **'Flameproof' Ex d (or FLP)**
- **Non Sparking Ex n**
- **Increased Safety Ex e**
- **Encapsulation Ex m**
- **Quartz or Sand Filled Ex q**
- **Oil Immersed Ex o**
- **Pressure or Purge Ex p**

Periodic Inspection and testing should be undertaken to ensure continued compliance to the standards (BSEN60079-XX). The 'type' (Initial, Periodic) and 'grade' (Detailed, Close or Visual) of inspection being determined by a continued monitoring process.

Requirements for 'overload' testing confirming compliance to the 'Five second rule' are also ensured by physical injection of test currents using specialist equipment.

Inspection Requirements

Hazardous

To enable plants that handle flammable materials to operate in a safe manner, care must be taken in the design and selection of electrical equipment. As previously shown there are many different types of protection standards and whichever type of equipment is used it must be installed and maintained correctly. When the equipment chosen for a particular application is to be installed great care must be taken to ensure that it meets the requirements of the 'Certificate of Conformity' and 'Area Classification'. If equipment is installed incorrectly then a risk of explosion occurs. With the equipment installed correctly it must be regularly inspected to ensure that it complies with the 'Certificate of Conformity' and the associated 'Installation Codes of Practice' and any defects noted are quickly rectified.

A 'Schedule', which contains all relevant information, is made available. This information will include such items as Temp classification; Zone grouping; Gas classification; type of equipment fitted; certification details; description of apparatus; location reference; floor plans etc. The inspector will check all installation requirements in relation to the installation and maintenance of the electrical equipment.

Atex Solutions Limited can offer a 'Total Care' or tailored package to ensure conformity to the various regulations *.

With design, installation, maintenance and testing of both hazardous and non-hazardous installations, Atex Solutions Limited can ensure total compliance.

Non-Hazardous

A Periodic test and inspection is required of all areas of to the current requirements of BS7671, with all aspects of an installation needing to be checked every three (3) to five (5) years. This however can create enormous difficulties for clients as the inconvenience caused and power outage, means work is disrupted considerably. Where it is possible Atex Solutions Limited can break down the work that is required over a fixed frequency into manageable workloads causing much less disruption and down time. Where it is only possible to periodically test and inspect once every fixed frequency Atex Solutions Limited will undertake by agreement the quickest and most cost effective way of doing so.

Along with planning of the work, co-ordination and where agreed correction and repair of any faults or con-compliance found, the client can be assured that conformance with the regulations is afforded.

** DSEAR; ATEX; (IEC) BSEN 60079-XX-X; PM82 [or amendment(s)]*

Example Service Agreement

(Not exhaustive)

Atex Solutions Limited will undertake for and behalf the client:

1: To schedule, co-ordinate, plan and execute all activities required by the regulations, as identified in items below, to ensure compliance.

2: **EAWR 1989** ('In service Testing and Inspection of Portable and Transportable equipment')

Initial, Periodic and 'Ad-Hoc' testing and inspection, including registration, of all portable apparatus. Inclusive of the 'Specialist Requirements' of equipment for use in 'A Potentially Explosive Atmosphere'. To include Item Identification labelling as appropriate.

3: **BS7671** (as amended).

Periodic testing and inspection of all areas of plant and associated 'non plant' (i.e. 'office block') to the current requirements of BS7671.

The work undertaken may be 'subdivided' into manageable activities, as identified below where necessary, to cause as little 'down time' as possible.

To include Initial/Periodic:

RCD protection
Earth Continuity
Insulation testing
Static Earthing Protection
Earth Loop/PSC on 240Vac outlets
Devices For Isolation and Switching
Lightning Protection

4: **(IEC) BSEN 60079-xx-xx**

'Initial and periodic' testing and inspection of all identified hazardous areas (as identified by XXXXX to the requirements.

Initial/Periodic of all 'Ex' equipment.

The 'Approval' of Intrinsically Safe Systems. at, or post, design/modification ('Modification') stage to ensure compliance prior to installation.

(Service Agreement ..Cont)

To plan and co-ordinate all initial/periodic testing to ensure conformance to the appropriate regulations including 'shutdown' work (detailed) where applicable.

To provide appropriate technical assistance and expertise to ensure continued compliance to the appropriate standards for in-service testing and inspection.

To provide, where requested and agreed, appropriate 'tailored' training to personnel for 'Electrical equipment for use in a potentially explosive atmosphere' [1]

5: **Electrical/Instrument Installation**

Supply of suitably qualified and appropriate personnel as required to undertake electrical/instrumentation installation and/or maintenance work as requested by the responsible representative (or his nominee) using the Day Rates attached.

To 'quote' for electrical/instrumentation installation/maintenance work to the requirements of BS7671 and BSEN60079 (potentially explosive atmospheres for both Gas and Dust) as requested.

All work undertaken to include appropriate reports and advice to the responsible person within the business ensuring compliance with the requirements of the regulations.

To offer advice on compliance to the appropriate regulations (as identified) as and when amended where existing documentation is non-compliant or does not exist.

[1] Training – where applicable is not included in the above schedule of rates as this is dependant on the number of personnel attending each course.

[2] Call-out is where a previous arrangement has not been made during 'Normal Hours' with a 'representative' of Atex Solutions Limited.

For further information or to arrange a **no obligation** visit to your premises please make contact by any of the means below:

Telephone:	+44 (0) 1253 855 898
Fax:	+44 (0) 1253 539000
Email:	Info@atexsolutions.co.uk
Via Web:	www.atexsolutions.co.uk
Mail:	Atex Solutions Limited Hillhouse International Business Park Fleetwood Road North Thornton Cleveleys Lancashire FY5 4QD UK
Main Contact:	Mr Kevin Pennington Managing Director
Secondary Contact:	Mr Mark Butterworth Engineering Director

Some of our clients include:

BGE (UK)

Scotia Gas

Bae Systems

Burtons Foods

Victrex PLC

Vinnolit Hillhouse Limited

Incorez Limited

Sika UK Limited

Asashi Glass (AGCCE)

Perstorp Ltd

Addison Project PLC

EMCOR Facilities

TClarke UK

D&S Facilities

NPL Ltd

EXAMPLES OF REPORTS FOR ABOVE

Emergency Lighting Reports

EMERGENCY LIGHTING INSPECTION AND TEST CERTIFICATE

130 - Master

For systems designed to BS5266-1 and BS EN 50172/ BS 5266-8

Warning
Full duration tests involve discharging the batteries, so the emergency lighting system will not be fully functional until the batteries have had time to recharge. For this reason, always carry out testing at times of minimal risk, or only test alternate luminaires at one time.

Details of the Client

Client	Victrex PLC
Address	HILLHOUSE INTERNATIONAL BUISNESS PARK FLEETWOOD ROAD NORTH Thornton Cleveleys LANCASHIRE FY5 4QD

Details of the Installation

Installation	VTC		
Address	HILLHOUSE INTERNATIONAL FLEETWOOD ROAD NORTH Thornton Cleveleys LANCASHIRE FY5 4QD		
System manufacturer	LITEPLAN	Phone number	01708372223
System installer	N/A	Phone number	N/A
Competent engineer responsible for commissioning and annual tests	ATEX SOLUTIONS	Phone number	01253855898

BSI Installation Category	Type	Mode of Operation	Facilities	Duration (in minutes) For self-contained systems
X	3	A	180	

Summary of Inspection

Inspection and test carried out by	ATEX SOLUTIONS LTD	Date of inspection	29/12/2014
Address	HILLHOUSE INTERNATIONAL BUSINESS PARK FLEETWOOD RD NORTH THORNTON CLEVELEYS LANCASHIRE FY5 4QD		
Telephone number	01253 855898	NICEIC Enrolment Number	501725
Branch Number (If Applicable)	1		

I hereby certify that the emergency lighting system installation at the above premises has been inspected and tested by me in accordance with the 'Results Schedule of Items inspected and tested' on page 2, and to the best of my knowledge and belief, the installation complies at the time of my inspection and testing with the recommendations given in BS 5266. Emergency lighting Part 1:2005. Code of practice for the Emergency lighting of premises, published by the BSI for a category X 3 A 180 installation except as stated in section D.

For and on behalf of	ATEX SOLUTIONS LTD		
Person responsible for the inspection and test	GARY TOWLE	Position	TEST ENGINEER
Signature		Date	17/02/2015

Comments

Details of additions or modifications to the system or the premises since original installation
Details of deviations from standards

Addition or Modification or Requirement No	Details	Date
Comments	Need for repair of system notified	02/02/2015

Action to be taken on finding a failure

* The supplier of the system or a competent engineer should be contacted to rectify the fault.
* A risk assessment of the failure should be conducted, this should evaluate the people who will be at increased risk and the level of that risk. Based on this data and, if necessary advice from the Fire Authority, the appropriate action should be taken.
* Action may be:
  - To warn occupants to be extra vigilant until the system is rectified
  - To initiate extra safety patrols
  - To issue torches as a temporary measure
  - In a high risk situation, to limit use of all or part of the building

NOTE Test programs for identifying early failures can reduce the chances of failure of two adjacent luminaires at the same time.

Emergency Lighting Inspection and Test Record

Test types: C = Commissioning test
M = Monthly test (see BS EN 50172:2004/BS 5266-8:2004, 7.2.3)
A = Annual test (see BS EN 50172:2004/BS 5266-8:2004, 7.2.4)

No.	Date of Test	Test Type	Result	Name	Signature
1	02/02/2015	M	Need for Repair of System Notified	GARY TOWLE	

130 - Master

Emergency Lighting Fault Action Record

Contact references

Contact Name & Phone Number

Maintenance engineer: GARY TOWLE — Competent engineer

Responsible person: RYAN ENGLAND — Site control

No.	Date of Failure	Equipment Supplier Contact & Phone number for replacement parts	Action taken to Safeguard/Rectify The System/Premises	Engineer Name	Signature	Date of Action/ Rectification
1	02/02/2015		Need for repair of system notified	GARY TOWLE		02/02/2015
	02/02/2015	fastel	bulkhead above front door	GARY TOWLE		02/02/2015

Portable Apparatus Report

(PAT)

ATEX SOLUTIONS LIMITED
INSPECTION GROUP
Tel: 01253 855898
Email: Inspection@atexsolutions.co.uk

PORTABLE ELECTRICAL EQUIPMENT

INSPECTION FOR :- *PVC9*

WORKSHOPS

Category 1

NUMBER	LOCATION	KEEPER	DESCRIPTION	MANUFACTURER	MODEL No.	SERIAL No.	REPORTS	Class	Freq	Earth	Insulation	Date_Inspected
PVC9 0011	WORKSHOPS	-	RADIO	MOTOROLA	MX1000	655QPY0863	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0012	WORKSHOPS	-	RADIO	MOTOROLA	MW1000	655QPY00894	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0015	WORKSHOPS	B Dolinson	RADIO	MOTOROLA	MT2100	355TWA0570	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0021	WORKSHOPS	B Dawson	RADIO	MOTOROLA	MT2100	355TWA0569	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0022	WORKSHOPS	B Dawson	RADIO	MOTOROLA	MT2100	355TWA0575	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0023	WORKSHOPS	-	RADIO	MOTOROLA	MT2100	355TWA0572	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0025	WORKSHOPS	B Jones	RADIO	MOTOROLA	MX1000	655QPY0897	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0026	WORKSHOPS	INST/ELECT	METER MEGGER	METROHM	7A	-	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0027	WORKSHOPS	-	MULTI CALIBRATOR	UNOMAT	-	00755	Failed. (Not found)	3	12	-	-	June,2012
PVC9 0029	WORKSHOPS	INST/ELECT	METER I.S.	UNOMAT	-	00473	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0032	WORKSHOPS	INST/ELECT	INITIATOR-TESTER	PEPPERNEL & FUCHS	2/EX	30 87 0019	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0034	WORKSHOPS	INST/ELECT	MULTIMETER	DAVIES	DIGITAL	185	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0035	WORKSHOPS	INST/ELECT	R T SOURCE	DANENG	RTS201	-	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0036	WORKSHOPS	P Da Costa	METER PULSE GENERATOR	GAMMATROL	-	170	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0039	WORKSHOPS	INST/ELECT	LAMP HAND RECHARGEABLE	BARDIC	-	-	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0049	WORKSHOPS	-	LAMP HAND	WOLF SAFETY LIGHT	TILL DAWN	-	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0070	WORKSHOPS	Workshop	DNOMAT LOOP CALIBRATOR	DRUCK	-	07733	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0072	WORKSHOPS	-	METER PULSE GENERATOR	GAMMATROL	-	118	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0074	WORKSHOPS	-	THERMOCOUPLE CALIBRATOR / IND	ROSEMOUNT	266	669214	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0076	WORKSHOPS	-	METER POTENTIOMETER	TRANS NATION	1030	IS 1030-6504	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0078	WORKSHOPS	B DAWSON	RADIO	MOTOROLA	-	355TVS1272	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0079	WORKSHOPS	FITTERS	LAMP HAND	WOLF SAFETY LIGHT	-	0208	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0084	WORKSHOPS	STORES	IQ ACTUATOR SETTING TOOL	ROTORK	-	0240346410500627	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0087	WORKSHOPS	M Pollard	HART COMMUNICATOR	FISHER ROSEMOUNT	R3E11D0000	0309-1157M	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0091	WORKSHOPS	B Dawson	RADIO	MOTOROLA	MT2100	355TVS1274	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0280	WORKSHOPS	-	RADIO	MOTOROLA	GP340	737THEO174	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0294	WORKSHOPS	-	TORCH	WOLFLITE	-	-	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0326	WORKSHOPS	M Pollard	HEAD TORCH	PELI	2610	-	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0370	WORKSHOPS	INST/ELECT	METER I.S.	UNIMAT	-	00473	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0491	WORKSHOPS	-	HAND LAMP RECHARGEABLE	WOLF	-	-	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0493	WORKSHOPS	Bob	I.S. Multi Meter	FLUKE	87V Ex	10650053	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0498	WORKSHOPS	Inst	VOLT STICK	RS	SE-51722	457-8327	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0501	WORKSHOPS	Inst	I.S. Multi Meter	FLUKE	87V Ex	10650061	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0534	WORKSHOPS	-	PRESSURE CALIBRATOR	DRUCK	DPI610IS	DPI610/IS61011818	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0544	WORKSHOPS	M Pollard	MULTIMETER (QUALITY SCHEDULE)	ISOTECH	-	11303605	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0560	WORKSHOPS	M Pollard	HEAD TORCH	PELI	2610	-	Inspected ok. (Visual only)	3	12	-	-	June,2013
PVC9 0589	WORKSHOPS	D Sidebottom	MULTIMETER	FLUKE	87	10640236	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0593	WORKSHOPS	-	LAMP BATTERY	-	-	-	Failed. (Not found)	3	12	-	-	June,2013
PVC9 0601	WORKSHOPS	M Pollard	HEAD TORCH	PELI	2610	-	Inspected ok. (Visual only)	3	12	-	-	June,2013

Microwave Ovens Report

ATEX SOLUTIONS LIMITED
INSPECTION GROUP
Tel: 01253 855898
Email: Inspection@atexsolutions.co.u

PORTABLE ELECTRICAL EQUIPMENT

INSPECTION FOR :- *Vinnolit*

MICROWAVES

Category **2**

NUMBER	LOCATION	KEEPER	DESCRIPTION	MANUFACTURER	MODEL No.	SERIAL No.	REPORTS	Class	Freq	Earth	Insulation	Date_Inspected
PVC9 M0001	MICROWAVES	Offices mesuroom	MICROWAVE	HINARI	MX702	SDH00010502802	Failed. (Reading =5)	1	6	-	-	January,2013
PVC9 M0002	MICROWAVES	East Stores mesuroom	MICROWAVE	SHARP	R874	-	Inspected ok. Peak 1.28	1	6			January,2013
PVC9 M0003	MICROWAVES	Plant mesuroom	COMBI-MICROWAVE	CLOCKWORK	SIGNATURE	SO29W114980G17392	Inspected ok. Peak 3.55	1	6			January,2013
PVC9 M0004	MICROWAVES	Main control room	MICROWAVE	Morphy Richards	P80D20P-YU/H	T212W108556G0570	Inspected ok. Changed Out Peak 1.30	1	6			January,2013
PVC9 M0012	MICROWAVES	Plant Mesuroom	MICROWAVE / OVEN	Clockwork	Signature	10522253603170	Inspected ok. Peak 0.92	1	6			January,2013

Electrical Installation Certificate
(Periodic Similar [Amtech Systems])

ELECTRICAL INSTALLATION CERTIFICATE
[BS 7671:2008 as amended]

156 - Master

Details of the Client

Client/ Address	Victrex PLC, HILLHOUSE INTERNATIONAL BUISNESS PARK, FLEETWOOD ROAD NORTH, Thornton Cleveleys, LANCASHIRE, FY5 4QD

Details of the Installation

Address:	new blending forklift chargers, HILLHOUSE INT, FLEETWOOD RD NORTH, Thornton Cleveleys, LANCASHIRE, FY5 4QD	The installation is: New	N/A
Extent of the installation covered by this certificate	INSTALL 2 NEW CIRCUITS FOR FORKLIFT CHARGERS TO EXTERNAL EAST WALL LEAN TOO	An Addition	✓
		An Alteration	N/A

Design

I being the person(s) responsible for the design of the electrical installation (as indicated by my signature(s) below), particulars of which are described above, have exercised reasonable skill and care when carrying out the design hereby CERTIFY that the design work for which I have been responsible is, to the best of my knowledge and belief in accordance with BS 7671 amended to July 2011 except for the departures, if any detailed as follows:

Details of departures from BS7671, as amended (Regulations 120.3, 133.5): None

The extent of liability of the signatory or signatories is limited to the work described above as the subject of this certificate.
For the DESIGN of the installation:

Signature		Date	30/04/2015	Name	ATEX SOLUTIONS	Designer 1
Signature	N/A	Date	N/A	Name	N/A	Designer 2 **

**(where there is divided responsibility for the design)

Construction

I being the person(s) responsible for the construction of the electrical installation (as indicated by my signature(s) below), particulars of which are described above, have 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 July 2011 except for the departures, if any detailed as follows:

Details of departures from BS7671, as amended (Regulations 120.3, 133.5): None

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	30/04/2015	Name	CHRIS McCAFFERY	Constructor

Inspection and Testing

I being the person(s) responsible for the inspection and testing of the electrical installation (as indicated by my signature(s) below), particulars of which are described above, have exercised reasonable skill and care when carrying out the inspection and testing hereby CERTIFY that the work for which I have been responsible is, to the best of my knowledge and belief in accordance with BS 7671 amended to July 2011 except for the departures, if any detailed as follows:

Details of departures from BS7671, as amended (Regulations 120.3, 133.5): None

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	30/04/2015	Name	GARY TOWLE	Inspector
Reviewed by						
Signature		Date	30/04/2015	Name	MARK BUTTERWORTH	Qualified Supervisor

156 - Master

Particulars of the Organisation(s) Responsible for the Electrical Installation

DESIGN (1)	Organisation	ATEX SOLUTIONS LTD	
Address	HILLHOUSE INTERNATIONAL BUSINESS PARK FLEETWOOD RD NORTH THORNTON CLEVELEYS LANCASHIRE FY5 4QD Tel 01253 855898	NICEIC Enrolment Number	501725
		Branch No.(If Applicable)	1
DESIGN (2)	Organisation	N/A	
Address	Tel N/A	Registration Number	
CONSTRUCTION	Organisation	ATEX SOLUTIONS LTD	
Address	HILLHOUSE INTERNATIONAL BUSINESS PARK FLEETWOOD RD NORTH THORNTON CLEVELEYS LANCASHIRE FY5 4QD Tel 01253 855898	NICEIC Enrolment Number	501725
		Branch No.(If Applicable)	1
INSPECTION AND TESTING	Organisation	ATEX SOLUTIONS LTD	
Address	HILLHOUSE INTERNATIONAL BUSINESS PARK FLEETWOOD RD NORTH THORNTON CLEVELEYS LANCASHIRE FY5 4QD Tel 01253 855898	NICEIC Enrolment Number	501725
		Branch No.(If Applicable)	1

Supply Characteristics and Earthing Arrangements

System Type(s)

TN-S	✓
TN-C-S	N/A
TN-C	N/A
TT	N/A
IT	N/A

Number and Type of Live Conductors

		a.c.	✓	d.c.	N/A
1-Phase (2 wire)	N/A	1-Phase (3 wire)	N/A	2 Pole	N/A
2-Phase (3 wire)	N/A			3 Pole	N/A
3-Phase (3 wire)	N/A	3-Phase (4 wire)	✓	Other	N/A
Other	N/A				

Nature of Supply Parameters

Nominal Voltage	U	400	V	Uo 230	V
Nominal frequency	f	50	Hz		
Prospective fault current	Ipf	20	kA		
External loop impedence	Ze	0.01	Ω		
Number of sources		1			

Characteristics of Primary Supply Overcurrent Protective Device(s)

BS(EN)	60947-2 ACB	
Type	N/A	
Rated current	2000	A
Short circuit Capacity	65	kA
Confirmation of Polarity	✓	

Particulars of Installation at the Origin

Means of Earthing

Distributor's facility	✓
Installation earth electrode	N/A

Details of Installation Earth Electrode (where applicable)

Type (eg rod(s), tape etc)	N/A	Location	N/A
Electrode resistance, R_A	N/A Ω	Method of measurement	N/A

Main Switch or Circuit-Breaker

Type BS(EN)	60947-2	Voltage Rating	690	V	
No. of poles	4	Current Rating	2000	A	
Supply Conductors material	Copper	RCD operating current, IΔn	N/A	mA	
Supply Conductors CSA	2*300	mm^2	RCD operating time at, IΔn	N/A	ms

Maximum Demand (load)

N/A Amps

Protective measure(s) against electric shock

ADS

Earthing and Protective Bonding Conductors

Earthing Conductor		Main Protective bonding conductors	
material:	Copper	material:	Copper
csa:	70 mm^2	csa	70 mm^2
Continuity/ connection verified	✓	Continuity/ connection verified	✓

Bonding of extraneous conductive parts (✓)

Water	N/A	Gas	N/A
Oil	N/A	Steel	✓
Lightning	✓	Other	N/A

Comments on Existing Installation

Where appropriate comments on the existing installation are to be found on page(s) None

Next Inspection

I , The designer(s) RECOMMEND that this installation is further inspected and tested after an interval of not more than 5 Years or change of tenancy

156 - Master

Schedule of Items Inspected

PROTECTIVE MEASURES AGAINST ELECTRIC SHOCK

Basic and fault protection

- N/A — SELV
- N/A — PELV
- N/A — Double or Reinforced Insulation

Basic Protection

- ✓ — Insulation of live parts
- ✓ — Barriers or enclosures
- N/A — Obstacles **
- N/A — Placing out of reach **

Fault protection

Automatic disconnection of supply

- ✓ — Presence of earthing conductor
- ✓ — Presence of circuit protective conductors
- ✓ — Presence of main protective bonding conductors
- N/A — Presence of earthing arrangements for combined protective and functional purposes
- ✓ — Presence of adequate arrangements for other source(s), where applicable
- N/A — FELV
- ✓ — Choice and setting of protective and monitoring devices (for fault protection and/or overcurrent protection)

Non-conducting location **

- N/A — Absence of protective conductors

Earth-free local equipotential bonding **

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

Electrical Separation

- N/A — For **one item** of current-using equipment
- N/A — For **more than one item** of current-using equipment

Additional protection

- N/A — Presence of residual current device(s)
- ✓ — Presence of supplementary bonding conductors

** For use in controlled supervised/conditions only

Prevention of mutual detrimental influence

- ✓ — Proximity of non-electrical services and other influences
- N/A — Segregation of Band I and Band II circuits and Band II insulation used
- ✓ — Segregation of safety circuits

Identification

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

Cables and conductors

- ✓ — Selection of conductors for current-carrying capacity and voltage drop
- ✓ — Erection methods
- ✓ — Routing of cables in prescribed zones
- ✓ — Cables incorporating earthed armour or sheath, or run in an earthed wiring system, or otherwise adequately protected against nails, screws and the like
- N/A — Additional protection by 30mA RCD for cables concealed in walls (where required, in premises not under the supervison of skilled or instructed persons)
- ✓ — Connection of conductors
- ✓ — Presence of fire barriers, suitable seals and protection against thermal effects

General

- ✓ — Presence and correct location of appropriate devices for isolation and switching
- ✓ — Adequacy of access to switchgear and other equipment
- ✓ — Particular protective measures for special installations and locations
- ✓ — Connection of single pole devices for protection or switching in line conductors only
- ✓ — Correct connection of accessories and equipment
- N/A — Presence of undervoltage protective devices
- ✓ — Selection of equipment and protective measures appropriate to external influences
- ✓ — Selection of appropriate functional switching devices

Schedule of Items Tested

+ see note below

- ✓ — External earth fault loop impedence, Ze
- N/A — Installation earth electrode resistance, R_A
- ✓ — 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 — Basic Protection by barrier or enclosure provided during erection
- N/A — Insulation of non-conducting floors and walls
- ✓ — Polarity
- ✓ — Earth fault loop impedance, Zs
- ✓ — Verification of phase sequence
- N/A — Operation of residual current devices
- ✓ — Functional testing of assemblies
- ✓ — Verification of voltage drop

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) — N/A

+ All boxes must be completed

✓ to indicate an inspection has been carried out and the result is satisfactory
N/A to indicate the inspection is not applicable to a particular item
x to indicate an inspection has been carried out and the results not satisfactory (applicable for a periodic inspection only)

SCHEDULE OF CIRCUIT DETAILS FOR THE INSTALLATION — 156 - Master

Board Details

TO BE COMPLETED IN EVERY CASE	ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION	
Location of distribution board: NEW BLENDING MAINS ROOM	Supply to distribution board is from: SubMains(DB05, 6/TP)	Associated RCD (if any) BS(EN): N/A
Distribution board designation: DB05/6	No of phases: 3 — Nominal Voltage: 400 V	RCD No of poles: N/A
	Overcurrent protective device for the distribution circuit	
	Type BS(EN): 60947-2 MCCB — Rating: 125 A	RCD rating, I∆n: N/A mA

Circuit Details

Circuit number and line	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa: Live mm²	Circuit conductors csa: cpc mm²	Max. permitted disconnection time s	Overcurrent protective device: BS(EN)	Overcurrent protective device: Type	Overcurrent protective device: Rating A	Overcurrent protective device: Short circuit capacity kA	RCD: Op. current I∆n	Max. permitted Zs Ω
1/TP	Circuit Not Tested												
2/TP	Circuit Not Tested												
3/TP	Circuit Not Tested												
4/TP	Circuit Not Tested												
5/TP	Circuit Not Tested												
6/TP	Circuit Not Tested												
7/TP	Circuit Not Tested												
8/TP	Circuit Not Tested												
9/TP	Circuit Not Tested												
10/TP	Circuit Not Tested												
11/TP	Circuit Not Tested												
12/TP	Circuit Not Tested												
13/TP	Circuit Not Tested												
14/L1	Circuit Not Tested												
14/L2	Circuit Not Tested												
14/L3	FORK LIFT BATTERY CHARGER RIGHT	F	E	1	10	10	0.4	60898 MCB	C	32	10	N/A	0.58
15/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
15/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
15/L3	FORK LIFT BATTERY CHARGER LEFT	F	E	1	10	10	0.4	60898 MCB	C	32	10	N/A	0.58
16/TP	SPARE	-	-	-	-	-	-	-	-	-	-	-	-

Wiring Code

A	B	C	D	E	F	G	H	O
Thermoplastic insulated/ sheathed cables	Thermoplastic cables in metallic conduit	Thermoplastic cables in non-metallic conduit	Thermoplastic cables in metallic trunking	Thermoplastic cables in non-metallic trunking	Thermoplastic/ SWA cables	Thermosetting/ SWA cables	Mineral-insulated cables	Other

SCHEDULE OF CIRCUIT TESTS FOR THE INSTALLATION

156 - Master

Board Tests

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

Zs	0.05 Ω	Operating times of associated RCD (If any)	At $I_{\Delta n}$	N/A	ms
Ipf	4.7 kA		At 5I $_{\Delta n}$ (If applicable)	N/A	ms
Confirmation of Supply polarity	✓				

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	N/A	RCD	N/A
Insulation resistance	N/A	Multi-function	13071394
Continuity	N/A	Other	N/A

Circuit Tests

Circuit number and line	Circuit impedances Ω					Insulation resistance				Polarity	Maximum measured earth fault loop impedance	RCD		
	Ring final circuits only (measured end to end)			All circuits (At least one column to be completed)		Line/ Line	Line/ Neutral	Line/ Earth	Earth/ Neutral			Operating times		Test button operation
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$R_1 + R_2$	R_2	MΩ	MΩ	MΩ	MΩ		Ω	At $I_{\Delta n}$ ms	At 5I $_{\Delta n}$ ms	
1/TP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2/TP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3/TP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/TP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5/TP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6/TP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/TP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/TP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9/TP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/TP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11/TP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12/TP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
13/TP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14/L1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14/L2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14/L3	N/A	N/A	N/A	0.27	N/A	N/A	>200	>200	>200	✓	0.32	N/A	N/A	N/A
15/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15/L3	N/A	N/A	N/A	0.27	N/A	N/A	>200	>200	>200	✓	0.32	N/A	N/A	N/A
16/TP	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Tested By

Signature		Position	TEST ENGINEER
Name	GARY TOWLE	Date of testing	30/04/2015

ELECTRICAL INSTALLATION CERTIFICATE
GUIDANCE NOTES FOR RECIPIENTS

This safety certificate has been issued to confirm that the electrical installation work to which it relates has been designed, constructed and inspected in accordance with British Standard 7671:2008 (as amended) (The IEE 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 owner.

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 and any schedules are included in the project health and safety documentation.

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 on page 2 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 an existing installation. It should not have been issued for the inspection of an existing electrical installation. An "Electrical Installation Conditioning Report" should be issued for such an inspection.

The certificate is only valid if a test result schedule including test results is appended.

These notes are based on those seen in Appendix 6 BS 7671:2008 (as amended)