



**Ministry
of Defence**

ESTC Standard No. 6

Part 1 – Electrical

2013 Edition

(Incorporating Amendment No. 1 – July '13)



Prepared by:

The Explosives Storage and Transport Committee

Ministry of Defence

Manual of Standards for Storage and Transport of Military Explosives

ESTC Standard No. 6

**Requirements for the Commissioning, Inspection, Testing and
Maintenance of Works for Explosives Facilities**

**Part 1 – Electrical
2013 Edition**

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Foreword

ESTC Standard No 6 is the MOD's requirements for commissioning, inspection, testing and maintenance of works for explosives facilities in accordance with JSP 482 Chapter 8. It has been mandated for these purposes since 2003 when it replaced Defence Estates (DE) Functional Standard 10 (FS10).

It is produced by the Electrical Safety Working Group (ESWG) of the Explosive Storage and Transport Committee (ESTC) and references all relevant British and European Standards for maintenance of electrical installations, lightning protection systems (LPS), ATEX equipment and conducting and anti-static floors. By referencing all of these relevant standards the end result is a standardised framework for maintenance frequency and reporting format across the whole of the MOD's explosives estate.

All personnel who have responsibilities in the maintenance and management of explosives facilities shall be fully aware of the contents of this document and JSP482 Chapter 8. The following is a list of personnel who this document is applicable to; it is not exhaustive and may differ from site to site:

- Heads of Establishments (HoEs)
- Property Managers (PROMs)
- Establishment Works Consultants (EWCs)
- Works Service Managers (WSMs)
- Private Finance Initiative (PFI) Contractors
- Prime Contractors
- Principal Support Providers (PSPs)
- Service Personnel
- Facility Managers (FMs)
- Site Estate Team Leader (SETL)

Any other parties involved in undertaking the commissioning, inspection, testing and maintenance of Works for Explosives Facilities on the MOD estate

The application of the requirements contained within this Standard is mandatory. Failure to comply may result in explosives licences being removed or suspended by the licensing authority.

This Standard has been devised for the use of the Crown and of its contractors in the execution of contracts for the Crown and, subject to the Unfair Contracts Terms Act 1977, the Crown will not be liable in any way what-so-ever (including but without limitation negligence on the part of the Crown, its servants or agents) where this Standard is used for other purposes.

Abbreviations

The following list of abbreviations appears within this document.

ATEX	European Explosive Atmosphere Regulations
BS	British Standard
BS EN	British Standard European Norm
CIE	Chief Inspector of Explosives
DIO	Defence Infrastructure Organisation
DSEAR	Dangerous Substances and Explosive Atmospheres Regulations
EICR	Electrical Installation Condition Report
EPB	Equipotential Bonding
ESO/ESR	Explosives Safety Officer/Representative
ESTC	Explosives Storage and Transport Committee
EWC	Establishment Works Consultant
FELV	Functional Extra Low Voltage
FS	Functional Standard
GN3	IET Guidance Note 3
HAPTM	Hazardous Area Personnel Test Meter
HD	Hazard Division
HoE	Head of Establishment
IET	Institution of Engineering and Technology
IS	Intrinsically safe
JSP	Joint Service Publication
LPS	Lightning Protection System
M&E	Mechanical & Electrical
MOD	Ministry of Defence
N/A	Not Applicable
N/S	Not Satisfactory
PES	Potential Explosive Site
PELV	Protected Extra Low Voltage
PROM	Property Manager
PFI	Private Finance Initiative
RCBO	Residual Current Circuit Breaker with Over-current Protection
RCD	Residual Current Device
S	Satisfactory
SELV	Separated Extra Low Voltage
WSM	Works Services Manager

Definitions

The following definitions also appear within this document:

Inspection	An action comprising careful scrutiny of an item/system carried out either without dismantling, or with the addition of partial dismantling as required, supplemented by means such as measurement, in order to arrive at a reliable conclusion as to the condition of an item/system.
Visual Inspection	An inspection, which identifies, without the use of access equipment or tools, those defects, such as missing bolts, which will be apparent to the eye.
Close Inspection	An inspection which encompasses those aspects covered by a visual inspection and, in addition, identifies those defects, such as loose bolts, which will be apparent by the use of access equipment, for example steps, (where necessary), and tools. Close inspections do not require the enclosure to be opened, or the equipment to be de-energised.
Detailed Inspection	An inspection which encompasses those aspects covered by a close inspection and, in addition, identifies those defects, such as loose terminations, which will only be apparent by opening the enclosure, and/or using, where necessary tools and test equipment.
Initial Inspection	An inspection of all the installation, equipment and apparatus before they are brought into service.
Periodic Inspection	An inspection of all the installation, equipment and apparatus carried out on a routine basis.
Test	To operate the installation, equipment and apparatus and to use the appropriate test instruments and gauges to show that the installation is safe to operate, functions correctly and complies with the stated criteria.
Check	To make a thorough examination of the installation, equipment and apparatus for wear, deterioration and damage to ascertain that the installation, equipment and apparatus is in satisfactory condition for continued operation, is correctly adjusted and complies with stated criteria.
Maintenance	The process of keeping a facility in proper order, good condition and fit for its intended purpose.
HoE ESO/ ESR	The HoE may formally delegate, by appointment, normal day to day responsibility and primacy for explosives safety at his establishment to a properly qualified and competent person, to be known as the Head of Establishment's Explosive Safety Officer, or Representative . Furthermore, personnel charged with supervising explosives safety, and especially with licensing matters, are to be properly qualified by passing the appropriate Service or departmental course and must be deemed to possess and maintain an appropriate level of competence.
Explosive Facilities	Explosives Facilities include explosives storage, processing and testing facilities.
Non Explosives Buildings	Non Explosives Buildings are buildings, which do not contain explosives either within or outside an Explosives Area.

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1. Introduction to the 2013 Edition

It is MOD policy to align with National and International Standards wherever possible. The key aim for ESTC Standard 6 is for it to closely align with relevant legislation and civilian standards, and as such where these standards are updated this document is also subject to change to reflect the amendments to the civilian standards. The 2013 update is a response to the update of associated electrical standards.

The industry standards and guidelines referred to below remain central to ESTC Standard 6. Compliance with these standards is a minimum requirement where indicated. Particular aspects of ESTC Standard 6 are intended to be an enhancement of the industry standards where necessary. This takes into account the higher risks which are present for certain MOD explosive storage and processing applications when compared to the industry applications to which they were intended for. The applicable standards referred to are:

HSE Approved Code of Practice and Guidance, (L138), Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) 2002. This applies to Category A and B areas as defined within JSP 482 Chapter 8, along with any zone as defined within DSEAR.

- HSE Approved Code of Practice and Guidance, (L139), Manufacture and Storage of Explosives Regulations (MSER) 2005. This applies to all explosives buildings.
- IET Wiring Regulation (BS7671:2008) including Amendment 1. This came into force in January 2012 and all electrical installations thereafter are to be designed and maintained in accordance with these updated regulations.
- BS EN 60079-17, Explosive Atmospheres. This is the European Standard which prescribes the inspection and maintenance procedures for electrical installations within hazardous areas, where the hazard may be caused by flammable gases, vapours, mists, dusts, fibres or flyings. This applies to Category A and B areas as defined within JSP 482 Chapter 8, along with any zone as defined within DSEAR.
- BS EN 62305:2011, Protection against Lightning. This is the European Standard which prescribes the requirements for design and maintenance of LPS.

This edition of ESTC Standard 6 has therefore been produced to incorporate these latest updates. The requirements for maintenance of conductive floors have not been changed although greater clarity and direction has been given.

2. Availability of Standard

Copies of ESTC Standard 6 MOD Forms are available in PDF format on-line from the Defence intranet at:

<http://defenceintranet.diif.r.mil.uk/Organisations/Orgs/HOCS/Organisations/Orgs/DSEA/Pages/MODForms.aspx>

All record sheets are available as MOD Forms which can be individually selected by the user and completed electronically or printed as hard copy templates. Contractors without access to the MOD Intranet should request copies from their MOD Sponsor/Customer.

3. Applicability of this standard

The procedures and maintenance intervals within this Standard apply to all explosives facilities licensed by MOD.

For applications overseas, the Host Nation's regulations will apply only if they are the more stringent and acceptable to the Licensing Authority.

This Standard applies to fixed installations only, including both 50/60Hz and 400Hz. When testing 400Hz systems care shall be taken to ensure that the personnel performing maintenance activities possess the knowledge, experience and correct specialist test equipment in order to attain correct readings.

Installations that fall below the prescribed criteria in this Standard may have their licences revoked by the Licensing Authority responsible until appropriate remedial action has been completed. The Inspectors of Explosives (IE) responsible for regulation and licensing of explosives facilities are detailed in JSP 482 Chapter 3.

4. Purpose of this publication

The purpose of this publication is to provide the user with a guide which:

- Is required for the inspection, testing and maintenance of electrical installations for facilities for the safe storage, processing and testing of explosive substances and articles.
- Complies with the relevant British Standards and associated Codes of Practice.
- Facilitates the development of a regular inspection and testing programme for the electrical installations of explosives facilities to ensure that these continue to function in a safe manner.
- Minimises the risk to explosive substances and articles caused by inadequately maintained apparatus.
- Consolidate and present maintenance, inspection and testing requirements specific to MOD Explosives Facilities in one document.

5. Types of Explosives Facilities

For details of the types of explosives storage and processing facilities see JSP 482 Chapter 6.

6. Principles of Design, Commissioning & Maintenance

For information on the principles of Design, Commissioning & Maintenance for explosives storage facilities see JSP 482 Chapters 5-8.

7. Electrical Categories and Standards for Electrical Installations

For information on the principles of electrical categories and standards for electrical installations and equipment within explosives storage and processing facilities see JSP 482 Chapter 8.

8. Safe Working and Competency

All persons working within a hazardous explosives area must be competent (e.g. skilled persons) as defined in JSP 375 and must be fully versed in the associated relevant standards.

Safety precautions, including competency and qualifications of maintenance staff responsible for commissioning, inspection and testing shall be in accordance with JSP482 Chapter 8 section 18 'Commissioning, Inspection and Testing of Electrical Installations and Equipment' and JSP 482 Chapter 18 'Works Services, The Control and Protection of Contractors in Explosives Facilities'.

9. Frequency of Inspection & Testing

The Inspection and Testing intervals specified in Table 1 and 2 (pages 18 & 19) of this document are the minimum requirement. More frequent Inspection and Testing and/or more detailed maintenance will be necessary where:

- There are adverse environmental conditions e.g. high and low temperatures, high humidity, corrosive atmosphere etc.
- There is a high risk of mechanical damage.
- The facility is subject to vibration.
- Manufacturers of installed equipment recommend a shorter maintenance interval.
- There is a requirement to test at varying seasons of the year.
- Current and previous test results indicate wear or deterioration.
- Other onerous specific site conditions exist.

The status of all electrical inspections shall be posted on the facility notice board to enable building users to establish building condition. MOD Form 2211 provides an example model form for capturing this information.

Test and Inspection shall incorporate 100% of final circuits for Initial Verification. For subsequent periodic testing of very large buildings testing may be carried out on a sampling basis with the agreement of the HOE or their nominated ESR. Sampling must include as a minimum 33% of circuits and all circuits must have been tested within a 6 year period. Note that for small facilities with few circuits 100% shall be subjected to testing at each periodic test date. [No definition for 'large' or 'small' buildings is given in this standard; this is left to the discretion of the contractor, but common sense should prevail, with as many circuits tested and inspected as practicable, taking due regard for the hazards associated with explosives buildings.](#)

10. Remedial Action Codes

Amendment 1 of BS7671:2008 (2011), more commonly known as IET 17th Edition Wiring Regulations, has introduced a new codification procedure for observations found during periodic inspection and test. The codes now range from C1, C2 and C3 instead of 1 to 4 as per previous editions.

The definitions of these codes are as follows:

- Code C1: Danger present, risk of injury, immediate action required
- Code C2: Potentially dangerous, urgent remedial action required
- Code C3: Improvement recommended

Full guidance on the interpretation of these codes is out of the scope of this document. Further information can be found in the following:

- Electrical Safety Council Best Practice Guide Number 4 Issue 3: 'Electrical installation condition reporting: Classification Codes for domestic and similar electrical installations'
- IET Guidance Note 3 – 'Inspection & Testing'
- IET Wiring Matters Winter 2011 Edition: 'Observation codes used for periodic inspection and testing of electrical installations within the scope of BS7671:2008 (2011)'

While these codes officially are required only for the Electrical Installation Condition Report (EICR) with respect to BS7671 test and inspection, to simplify the defect reporting process of all maintenance activities within ESTC Standard 6 the codes have been adopted for all other tests and inspections.

11. Contractors' Responsibilities to MOD

Upon completing the periodic maintenance activity, the contractor is to notify the Head of Establishment or their dedicated safety representative (e.g. ESR or HAM) immediately of the outcome of the work. It is acceptable for this to be in the form of a verbal confirmation as to whether the installation is satisfactory or not. This must then be followed up by the submission of the relevant ESTC Standard 6 MOD Forms as detailed below in the Logbook requirements section within 1 week of the date of testing.

12. Logbook Requirements

An ESTC Standard 6 logbook shall be compiled, updated, controlled and maintained by the FM provider. These records are the property of the MoD HoE for the site. These master records shall be made available for inspection by the relevant Inspector of Explosives (IE) or other inspecting authority.

Original versions of the certificates specified below are also to be provided to the HoE or nominated deputy for inclusion into the PES logbook.

Maintenance records must be kept for the life of the building, or for a minimum of 11 years.

The ESTC Standard 6 logbook shall contain all of the following:

- A Front Cover sheet (MOD Form 2200).
- One or more of the following three types of inspection Certificates:
 - Initial Verification ([MOD Form 2201](#))
 - Minor Installation Works ([MOD Form 2202](#))
 - Periodic Installation Condition Report ([MOD Form 2203](#))
- All applicable electrical inspection and test Certificates and Record sheets (MOD Forms) detailed within this document.
- Electrical as-built drawings.
- Explosion Protection Document (see JSP482 Chapter 8 for details) for Category A, B and DSEAR Zones.

13. Initial Verification Logbook Entries

Initial Verification must be completed for all elements of a new installation (electrical installation, LPS, Conducting floor) and whenever major refurbishment or upgrades are performed. Examples of upgrades/refurbishment include the installation of a new final circuit or distribution board, or any upgrade to the LPS which would warrant a change to the system's drawing.

The ESTC Standard 6 logbook entry for initial verification shall include:

- MOD Form 2200 – Front Cover Sheet
- MOD Form 2201 – Initial Verification Certificate
- MOD Form 2204 – Electrical Supply Characteristics (if applicable)
- MOD Form 2205 – Schedule of Inspections
- MOD Form 2207 – Visual, Close & Detailed Inspections Specific to Category A, B & DSEAR zones (if applicable)
- MOD Form 2208 – Generic Schedule of Electrical Installation Test Results (if applicable)
- MOD Form 2209 – Lightning Protection Systems (LPS) (if applicable)
- MOD Form 2210 – Conducting and Anti-static Floor Record Sheets (if applicable)

14. Minor Works Logbook Entries

An ESTC Standard 6 logbook Minor Works Certificate should be completed when small changes¹ to the facility electrical installation are undertaken requiring certification without the need to use an initial verification certificate. In these situations the areas of the installation that have been added, replaced or repaired need to be tested.

The Minor Works Certificate shall indicate which aspects of the facility installation are affected and the corresponding MOD Forms are to be completed and added to the facility log book.

The ESTC Standard 6 logbook entry for Minor Works shall include:

- MOD Form 2200 - Front Cover Sheet (if not already available)
- MOD Form 2202 - Minor Installation Works Certificate
- MOD Form 2204 - Electrical Supply Characteristics (if changed or not already available)
- MOD Form 2210 - Conducting and Anti-static Floor Record Sheets (if applicable)

15. Periodic Inspections Logbook Entries

Periodic Inspections shall be carried out as per the frequencies detailed in Tables 1 and 2 (pages [18](#) & [19](#)). The ESTC Standard 6 logbook entries for periodic inspections shall be:

¹ Typically minor works may include addition or replacement of an electrical socket or light fitting, replacement of lightning protection system components, or additional bonding for a conducting floor etc.

- MOD Form 2200 - Front Cover Sheet (if not already available)
- MOD Form 2203 – Periodic Installation Condition Report Certificate
- MOD Form 2204 - Electrical Supply Characteristics (if applicable and not already available)
- MOD Form 2206 - Electrical Installation Periodic Visual Inspection Record Sheets (if applicable)
- MOD Form 2207 – Visual, Close & Detailed Inspections Specific to Category A, B and DSEAR zones [\(if applicable\)](#)
- MOD Form 2208 – Generic Schedule of Electrical Installation Test Results (if applicable)
- MOD Form 2209 - Lightning Protection System (if applicable)
- MOD Form 2210 - Conducting & Anti-static Floor Record Sheets (if applicable)
- [MOD Form 2212 – RCD Functional Check Results \(if applicable\)](#)²

An Installation Periodic Condition Report Certificate ([MOD Form 2203](#)) shall be provided for each separate inspection/test or group of inspections/tests carried out at any one time [\(except for RCD functional checks\)](#). Without the supporting condition report, the test results shall not be valid. In addition, it is not acceptable to add new test records to any existing, completed forms or certificates.

16. Technical Authority and Advice

The Technical Authority for the Commissioning, Inspection, Testing and Maintenance of Electrical Works for MOD explosives facilities is the ESTC Technical Advisor (Electrical Safety), who can be contacted at:

DOSG ST3a,
Fir 3a, #4304,
MOD Abbey Wood,
Filton,
Bristol, BS34 8JH

Tel: 030 679 35817 or 030 679 35007
Fax: 030 679 35903

Additionally technical advice and assistance can be obtained from:

[DIO ODC-Eng Const PBE Nclr AH](#)
St Georges House,
Kingston Rd.
Sutton Coldfield,
West Midlands, B75 7RL

Tel: 0121 311 3620
Fax: 0121 311 2453

² [Note for RCD Functional checks there is no requirement to complete MOD Form 2203.](#)

Dispensations and rulings can only be given by the relevant IE in consultation with TA (Electrical Safety).

17. Inspection & Testing Schedule & Methodology

The following Jobs encompass the full extent of test and inspection as required by this standard:

- Job 1. Visual Inspection
- Job 2. Detailed/Close Inspection and Physical Checks
- Job 3. Safety Signs and Notices
- Job 4. Continuity Testing of Protective Conductors
- Job 5. Continuity of Ring Final Circuit Conductors
- Job 6. Insulation Resistance Tests
- Job 7. Separation of Circuits
- Job 8. Correct Polarity
- Job 9. Earth Electrode Resistance Testing
- Job 10. Earth Fault Loop Impedance Measurement
- Job 11. Residual Current Device Testing
- Job 12. Lightning Protection Systems
- Job 13. Conducting & Anti-static Floors

The following guidance documents are indispensable when complying with this document and should be referred to in conjunction with the job descriptions provided:

- IET GN3 provides comprehensive guidance on the inspection and testing of electrical installations.
- BS EN 60079-17 additionally provides in depth guidance on the maintenance of ATEX equipment installed within Category A, B & DSEAR zoned facilities.
- Guidance for LPS and Conducting & Anti-static floor maintenance is given in this document.

The results of the maintenance activities detailed below are to be recorded on the MOD Forms indicated and filed as per the direction given in the Logbook Requirements section of this publication and they are to be compared against past results. Any significant trend or change is to be investigated.

In addition to completing the test result record sheets, the appropriate Certificate (Initial Verification, Minor Installation Works or Periodic Installation Condition Report) shall also be completed.

18. Job Descriptions

Job 1 - Visual Inspection

For Category A and B Electrical Installations, or electrical installations within DSEAR Zones carry out a visual inspection as described in BS EN 60079-17, at [initial verification and then at](#) the maximum frequency given in Table 1, and record results on MOD Form 2207.

For Category C and D Electrical Installations carry out a visual inspection as follows:

- For initial verification carry out in accordance with GN3 Section 2.6 'Initial inspection' and record results on MOD Form 2205.
- For periodic inspections, carry out in accordance with GN3 section 3.9 'Periodic Inspection' at the frequency given in Table 2 and record results on MOD Form 2206.

Job 2 - Close and Detailed Inspection and Physical Checks (For Cat A, Cat B & DSEAR Zones)

Carry out Close and Detailed Inspections in accordance with BS EN 60079-17 and record the results on MOD Form 2207.

Job 3 - Safety Signs and Notices

Inspection of safety signs and notices are now carried out during the inspections in Jobs 1 and 2 and results are to be recorded on MOD Forms 2205, 2206 or 2207 as appropriate.

Job 4 - Continuity Testing of Protective Conductors

Perform testing in accordance with GN3 section 2.7.5 and record on MOD Form 2208.

Job 5 - Continuity of Ring Final Circuit Conductors

Perform testing in accordance with GN3 section 2.7.6 and record on MOD Form 2208.

Job 6 - Insulation Resistance Tests

Carry out in accordance with GN3 section 2.7.7 and record on MOD Form 2208.

NOTE

The insulation resistance to earth and between conductors shall be not less than 2MΩ.

Job 7 - Separation of Circuits

Perform testing in accordance with GN3 section 2.7.9 and record on MOD Form 2208.

Job 8 - Correct Polarity

Perform testing in accordance with GN3 section 2.7.12 and record on MOD Form 2208.

Job 9 - Earth Electrode Resistance Testing

Perform testing in accordance with GN3 section 2.7.13 and record on MOD Form 2208.

Job 10 - Earth Fault Loop Impedance (Zs)

Earth Fault Loop Impedance testing shall be carried out in accordance with GN3 section 2.7.15 and results recorded on MOD Form 2208.

NOTES

1. The line / earth fault loop impedance shall be measured at the following locations as appropriate:
 - The origin of the installation
 - Main Distribution Boards and/or Sub Main Distribution Boards
 - Final Circuit Distribution Boards
 - Socket outlets
 - Each lighting circuit
 - Isolating switches/control devices for fixed appliances
 - Exposed conductive parts of fixed appliances
 - Ring Final Circuits
2. Where it is unsafe to measure earth fault loop impedance due to exposing live terminals, Zs may be calculated using [the \$Z_e + \(R1 + R2\)\$ formulae, as described in IET GN3.](#)
3. When this test is carried out it is essential that all sensitive equipment is disconnected or damage to electronic equipment may occur. In the case of Category A, B and DSEAR zoned installations, frequent disconnection of ATEX certified accessories/equipment may lead to degradation of such accessories/equipment. Therefore, it is recommended that this test should only be carried out at a Detailed Inspection for Ex “d”, Ex “e”, Ex “n” and Ex “p” installations. For Ex “i” installations the test should only be carried out when Visual and Close Inspections suggest a loss of cable integrity.

Job 11 - Residual Current Devices (RCD/RCBO)

RCDs/RCBOs shall be tested in accordance with GN3 section 2.7.18 and all results recorded on MOD Form 2208 [for annual tests. MOD Form 2212 is to be completed for 3 monthly functional checks.](#)

NOTES

1. All RCDs/RCBOs are to be tested by a competent person with an approved test instrument every 12 months. On completion, the test push button shall be operated and verified for its effectiveness. RCDs/RCBOs that fail the test shall have their respective circuits isolated until the defective devices are repaired or replaced.

2. RCDs incorporated within socket outlets shall be tested by a competent person³ using the integral test device (e.g. push button) prior to each use and with a maximum duration between tests not exceeding three months. All RCDs incorporated within socket outlets that fail this “trip test” are to be removed from service until either repaired or replaced.

Job 12 - Lightning Protection Systems (LPS)

1. Test and Inspection of LPS shall be in accordance with the instructions in this section and results recorded on MOD Form 2209.
2. The testing of LPS shall not be undertaken when a thunderstorm warning is in place or lightning activity is observed.
3. Before disconnecting the lightning protection earth it shall be tested to ensure that it is not “live”, using a sensitive testing device (e.g. clamp-on milliammeter).
4. Test Results shall be compared to previous results and trend analysis carried out to ascertain whether there has been a significant degradation of the earthing.
5. Inspection and testing shall only be undertaken by personnel who:
 - Have technical knowledge and understanding of the theoretical and practical requirements for Class 1 LPS installations as described within JSP482 Chapter 8 and BS EN 62305, and;
 - Understand the complete requirements of visual inspections and tests as they relate to the installed LPS.
6. Buildings within the explosive storage & processing area which are exempt from the requirements of LPS⁴, but which have a legacy LPS installed shall be subjected to a visual inspection only, for the purposes of identifying broken conductors. Where such ‘open circuits’ are found remedial action shall be carried out to fix them.

NOTE

[EA Technology in Chester, UK, has developed a LPS training course which is specifically aimed at explosives buildings on the MOD estate. Details can be found at \[www.powerskillscentre.com/power-skills-centre/course-listing\]\(http://www.powerskillscentre.com/power-skills-centre/course-listing\) and click on the ‘Specialist Courses’ link.](#)

³Only personnel who have been trained in the operation of the RCD test button and can demonstrate understanding of its use, i.e. know when the trip test fails, shall complete this test

⁴ [A list of LPS exemptions is given within JSP482 Chapter 8](#)

Part 1 LPS Schematic

Produce a detailed drawing of the LPS clearly showing the following;

- Air Termination
- Down Conductors
- Earth Termination (i.e. Rods, Mats, Ring)
- Bonding

Part 2 Visual Inspection⁵

Inspect the LPS to [confirm that the installation complies with JSP482 Chapter 8 and BS EN 62305.](#)

Part 3 Test Requirements

Establish the electrical integrity of bonds and earth impedance of the LPS as follows:

- **Inaccessible Joints and Bonds** – All joints and bonds which cannot be accessed for inspection purposes shall be tested to ensure adequate continuity. A maximum resistance of 0.2Ω shall be allowed across each bond or joint. For earth covered buildings where the LPS is covered, test between the air termination conductor and the earth electrode bonds.
- **Rebar** - For structures utilizing steel-reinforced concrete (including pre-cast, pre-stressed reinforced units), the electrical continuity of the reinforcing bars shall be determined by electrical testing between the uppermost part and ground level. The overall electrical resistance shall not be greater than 0.2Ω , measured in accordance with BS EN 62305-3 Section E.4.3.
- **System Testing** - This is a test of the LPS with all equipotential bonding in place between the LPS and other facility earthing systems, and with all earth electrodes connected together. Measure the impedance to earth of the system at random points. The measured impedance is not to exceed 10Ω . If the impedance to earth of the whole LPS exceeds 10Ω , in the first instance, a check should be made to confirm that the earth electrodes conform to BS EN 62305-3 Figure 3.

⁵ Earth Covered Explosives Buildings will normally have the majority of their air termination and down conductors undercover of soil and thus will not be visible for inspection. In such cases electrical continuity tests should be carried out between any visible air termination conductor bond and the earth termination network as part of the 'inaccessible bonds and joints tests' and N/A entered against the visual inspections.

- **Earth Electrode⁶ Testing** – All earth electrodes shall be disconnected from the LPS and their impedances to earth measured. The impedance to earth of each earth electrode, when disconnected from the LPS, shall not be greater than 10Ω multiplied by the number of electrodes in the whole LPS earth termination network, and not differ by greater than a factor of 2 between each neighbouring earth electrode. If the impedance to earth exceeds the maximum determined value, in the first instance a check should be made to confirm that the earth electrode conforms to BS EN 62305-3 Figure 3.

NOTES

1. System testing and earth electrode measurements should be made using the fall of potential method as shown in Figure 1 and as described in IET Guidance Note 3 (section 2.7.13 pages 48-50).
2. Care must be taken when using this method to ensure that valid results are obtained. For accurate measurements the potential electrode requires to be located outside of the areas of influence of both the electrode under test and the current probe. This may be difficult to achieve for the full system test, as good practice dictates that the current electrode is placed at a distance away from the building equal to 10 times the longest dimension of the earthing network. Therefore, where sufficiently long test leads are not available, or the distance makes the fall of potential test method impractical, alternative methods such as the ‘Slope’ method are to be used. Details of this method are available in a number of online free downloadable documents. An excellent source for information on this and other methods can be found in Megger’s ‘Getting Down to Earth’, available at the following website:
www.biddlemegger.com/biddle-ug/GettingDownToEarth-MC.pdf

⁶ Earth electrodes may exist in a variety of formats, such as mats, single rods or multiple rods (clusters/groups). For isolated electrode testing in situations where such groups have been installed (see JSP482 Chapter 8 Annex D for details of ‘groups’) the rods which make up the group are to remain connected to each other but disconnected from the rest of the earth termination network and LPS, and tested as a single electrode.

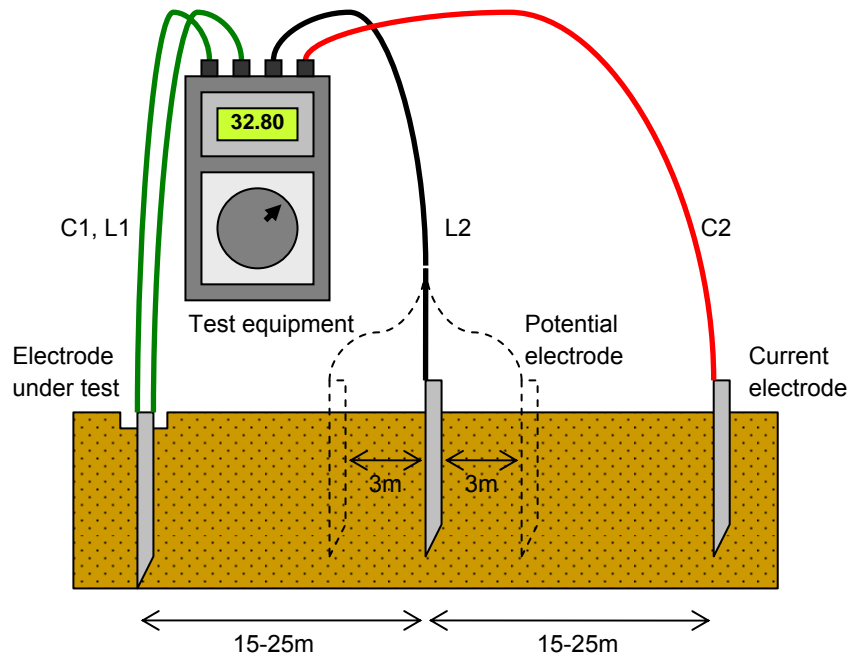


Figure 1 – E.g. Fall of Potential Method (for illustration purposes only)

Job 13 - Conducting and Anti-Static Floors

1. Test and Inspection of Conducting and Anti Static Floors shall be in accordance with this section and results recorded on MOD Form 2210.
2. Trend Analysis Results shall be compared with previous year's results to detect extent of degradation.
3. New conductive and anti-static floors shall be tested at installation and then at 3 and 9 months later, and thereafter annually at 11 or 12 monthly intervals to align with LPS or electrical installation inspections, which ever is more convenient.
4. Where there is evidence of wear or deterioration, the interval between tests should be reduced.
5. For new Conducting floors the initial measurements must be a maximum of 25k Ω to allow for progressive degradation through life. Thereafter the surface of the floor to the equipotential bonding strip (EPB) or main earth terminal (MET) is to be less than 50k Ω . Where a floor has failed the test it shall be cleaned, repaired or replaced as appropriate and retested.
6. For new Anti-static floors the resistance from the surface of the floor to earth is to be between 50k Ω and 2 M Ω .

7. Test Instrument Requirements. The test probe shall be a clean metal electrode of brass or copper, having a diameter of 25mm +/- 1mm and a mass of 225g +/- 15g. The measuring instrument shall have an open circuit voltage of nominally 100V dc and be capable of measuring resistance between values of 0Ω and 100kΩ with a resolution of 1kΩ or better and an accuracy of +/- 5%. Low resistance test leads of sufficient length to span the facility floor are required. Advice on suitable test equipment can be provided by TA (Electrical Safety)

Part 1 – Inspection

1. Ensure the site operator has certified the removal of all explosives from the facility, prior to commencing with the following inspections:
 - Inspect the complete floor area before proceeding with the test as follows:
 - (1). Visually inspect the floor for wear, damage or contamination and identify affected areas for remedial action
 - (2). Visually confirm the integrity of the equipotential bonding system (EPB), including that it is routed directly to the Main Earth Terminal (MET) without no supplementary connections to the LPS
 - (3). Confirm that the HAPTM is working correctly and positioned directly over the conducting/antistatic floor
 - (4). Floor is earthed to the EPB at a minimum of 2 points.
 - (5). Inspect electrical bonding of benches, floors, chairs, trolleys, mats, workstations, separately grounded equipment and any other equipment that grounds an operator, permanently or temporarily.
 - (6). Socket outlets are RCD protected
2. Provide an outline drawing of the conductive/anti-static floor on MOD Form 2210 (for larger floor areas use alternative/supplementary pages) noting:
 - All areas of damage, wear, deterioration and contamination
 - Positions of the connections from the facility earth to the floor
 - Chosen test points
 - Static discharge system with all major features shown.
 - EPB

Part 2 – Test Method

1. Clean the floor in accordance with the manufacturer's recommended procedures; ensure the floor is dry.

2. Using the appropriate test equipment, connect one end of the test instrument to the floor earth reference point and connect the other to the test probe as illustrated in Figure 2.

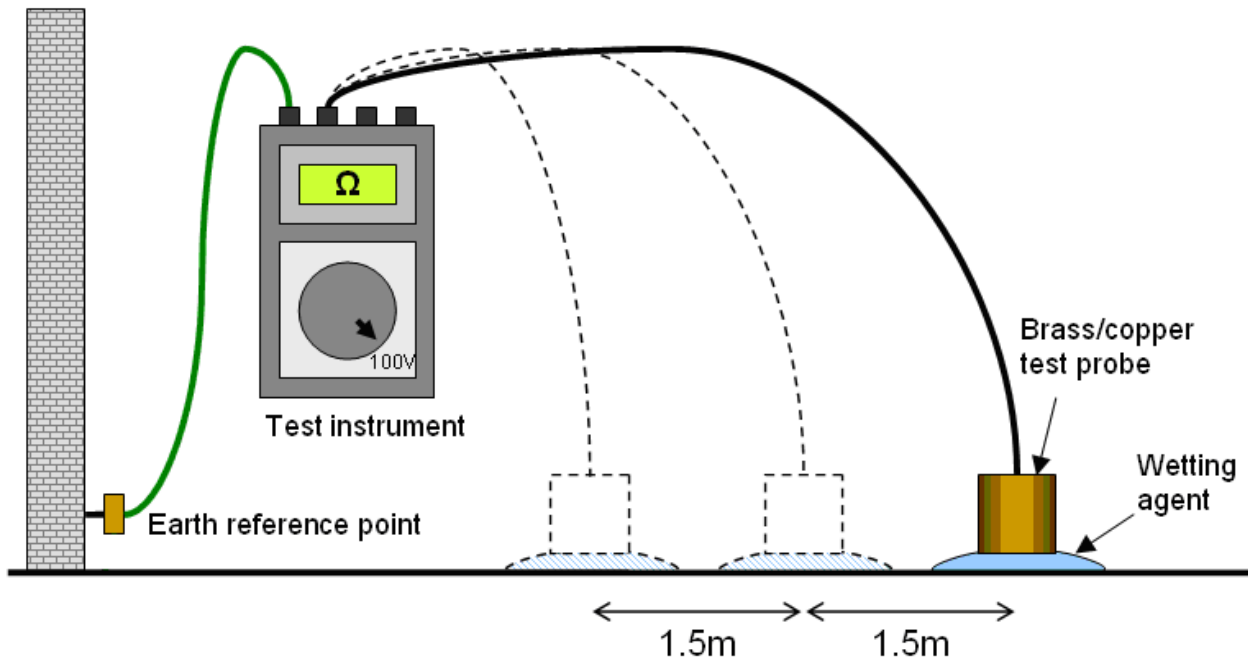


Figure 2 - Conducting & Anti-static Floor Test Method

3. Measure the floor resistance once in each area of floor, 1.5m x 1.5m, (Do not mark the floor) and record the results on MOD Form 2210.
4. Compare with the previous results and investigate any significant changes.

Part 3 - Static Discharge System (Equipotential Bonding)

1. Visually inspect the Static Discharge System and ensure it is:
 - (1). As low as possible on the walls (no higher than 500mm from ground & below item that is bonded to it)
 - (2). Connected to the main earth terminal, or an earthing star point with the electrical incomer sheath and other earth systems via the shortest possible length
 - (3). Not connected to the LPS down conductors at any other point
 - (4). Not connected through the external wall to the LPS
 - (5). Run in as straight a line as possible with few bends and corners
 - (6). No bonding connections are made where it is run above an opening
 - (7). Securely fitted with tight connections
 - (8). Free of deterioration, corrosion and damage
2. Test the Static Discharge System as follows:

- For systems dependent upon the MET or other star point disconnect the EPB from the MET and all other items which are bonded to it. Next measure the continuity between each end of the EPB. The resistance must not exceed 0.2Ω .⁷
- For systems with their own dedicated earth electrodes, in addition to the continuity test described [above](#), also carry out a Fall of Potential test on the earth electrode as per Figure 1. The max impedance shall be no higher than 10 Ohms.
- Reconnect all bonds which were disconnected.
- Electrically confirm the integrity of the EPB system throughout its entire length to the MET. If the EPB is in sections, i.e. not a continuous run throughout, then continuity of each section to the MET must be confirmed.

⁷ The purpose of this test is to demonstrate that equipotential bonding is achieved through the use of the EPB and not other conductors such as protective conductors or supplementary protective bonding conductors which could be removed at a later date.

19. Minimum Frequency of Maintenance for Cat A, B & DSEAR Zones

DESCRIPTION OF JOB AND CRITERIA	
VISUAL, CLOSE AND DETAILED INSPECTIONS	
Interval	Visual - 6 Monthly (See Note 1)
Interval	Close – 12 Monthly (See Note 1)
Interval	Detailed – 36 Monthly (See Note 1)
CONTINUITY OF PROTECTIVE CONDUCTORS, INCLUDING MAIN AND SUPPLEMENTARY BONDING	
Interval	36 Monthly (See Note 1)
CONTINUITY TESTING OF RING FINAL CIRCUIT CONDUCTORS	
Interval	12 Monthly (See Note 1)
INSULATION RESISTANCE	
Interval	36 Monthly (See Note 1)
PROTECTION BY SELV, PELV OR BY ELECTRICAL SEPARATION	
Interval	12 Monthly (See Note 1)
POLARITY	
Interval	12 Monthly (See Note 1)
EARTH FAULT LOOP IMPEDANCE	
Interval	36 Monthly (See Note 1)
EARTH ELECTRODE RESISTANCE (FOR TT SYSTEMS ONLY)	
Interval	11 Monthly
RESIDUAL CURRENT DEVICES (RCD)	
Interval	3 & 12 monthly
LIGHTNING PROTECTION SYSTEM (LPS)	
Interval	11 Monthly
CONDUCTING / ANTI-STATIC FLOOR	
Interval	<u>11</u> /12 Monthly (new floors to be tested at installation, then 3 months later, then 9 months)

Table 1 – Maintenance Activity Frequency (Cat A, B & DSEAR Zones)

Note 1: These tests and inspections should be carried out in the first instance at the intervals detailed. However based on the results of the visual inspections the inspecting authority may propose alternative frequencies for close and detailed inspection as necessary. If a close inspection highlights unsatisfactory issues then a detailed inspection may be required. Older installations or installations which are subject to adverse environmental conditions may require more regular detailed inspections as deterioration is likely to be more rapid. Some hazardous area equipment is designed and certified for an extended period, typically up to 10 years, without the need for any testing. This type of equipment is not intended to be subject to anything other than a visual inspection. Where this type of equipment is fitted the manufacturer's guidance should be followed.

20. Minimum Frequency of Maintenance for Cat C, D & Unlicensed buildings

DESCRIPTION OF JOB AND CRITERIA			
VISUAL INSPECTION ELECTRICAL INSTALLATION			
Explosive Facility Category	C & D	Unlicensed buildings within Explosives Area	
Interval	12 Monthly	12 Monthly	
CONTINUITY OF PROTECTIVE CONDUCTORS, INCLUDING MAIN AND SUPPLEMENTARY BONDING			
Explosive Facility Category	C & D	Unlicensed buildings within Explosives Area	
Interval	24 Monthly	5 Yearly	
CONTINUITY TESTING OF RING FINAL CIRCUIT CONDUCTORS			
Explosive Facility Category	C & D	Unlicensed buildings within Explosives Area	
Interval	24 Monthly	5 Yearly	
INSULATION RESISTANCE			
Explosive Facility Category	C & D	Unlicensed buildings within Explosives Area	
Interval	24 Monthly	5 Yearly	
PROTECTION BY SELV, PELV OR BY ELECTRICAL SEPARATION			
Explosive Facility Category	C & D	Unlicensed buildings within Explosives Area	
Interval	24 Monthly	5 Yearly	
POLARITY			
Explosive Facility Category	C & D	Unlicensed buildings within Explosives Area	
Interval	24 Monthly	5 Yearly	
EARTH FAULT LOOP IMPEDANCE			
Explosive Facility Category	C & D	Unlicensed buildings within Explosives Area	
Interval	24 Monthly	5 Yearly	
EARTH ELECTRODE RESISTANCE (FOR TT SYSTEMS ONLY)			
Explosive Facility Category	C, D & Unlicensed buildings within Explosives Area		
Interval	11 Monthly		
RESIDUAL CURRENT DEVICES (RCD)			
Explosive Facility Category	C, D, & Unlicensed buildings within Explosives Area		
Interval	3 & 12 monthly		
LIGHTNING PROTECTION SYSTEM (LPS)			
Explosive Facility Category	C, D & Unlicensed buildings within Explosives Area		
Interval	11 Monthly		
CONDUCTING / ANTI-STATIC FLOOR			
Explosive Facility Category	C	D	Unlicensed buildings within Explosives Area
Interval	11/12 Monthly (new floors to be tested at installation, then 3 & 9 months later)		N/A

Table 2 - Maintenance Activity Frequency (Cat C, D & Unlicensed Buildings)

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Annex A – Electrical Installation Maintenance Record Forms

The MOD Forms listed below are applicable to this document. Copies may be obtained by downloading from the following website (Contractors should request copies from their MOD Sponsor):

<http://defenceintranet.diif.r.mil.uk/Organisations/Orgs/HOCS/Organisations/Orgs/DSEA/Pages/MODForms.aspx>.

MOD Form 2200	Front Cover Sheet
MOD Form 2201	Initial Verification Certificate
MOD Form 2202	Minor installation Works Certificate
MOD Form 2203	Periodic Installation Condition report
MOD Form 2204	Electrical Supply Characteristics
MOD Form 2205	Schedule of Inspections (For New Installations Only)
MOD Form 2206	Electrical Installation Periodic Visual Inspection Record Sheets
MOD Form 2207	Visual, Close & Detailed Inspections Specific to Cat A, B & DSEAR Zones
MOD Form 2208	Generic Schedule of Electrical Installation Test Results
MOD Form 2209	Lightning Protection systems
MOD Form 2210	Conducting & Anti-Static Floors
MOD Form 2211	Electrical Inspection Status
<u>MOD Form 2212</u>	<u>RCD Functional Checks</u>

MOD FORM 2200

FRONT COVER SHEET

FACILITY DETAILS	
Establishment Address	
Building Number/Reference	
Electrical Category	
Facility Photo & Description (Including building use, processing/storage, construction type, presence of Conducting / Anti-static floor, LPS etc.)	

MOD FORM 2201

INITIAL VERIFICATION CERTIFICATE

Site:	Building:
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THE FOLLOWING JOB(S) IS/ARE APPLICABLE TO THIS CERTIFICATE

JOB DESCRIPTION	APPLICABLE (tick which applies)		IN ADDITION TO THIS FORM COMPLETE
Electrical Installation - Initial Verification Tests	Yes <input type="checkbox"/>	No <input type="checkbox"/>	MOD Forms 2204/5/7/8
Lightning Protection Systems	Yes <input type="checkbox"/>	No <input type="checkbox"/>	MOD Form 2209
Conducting and Anti-Static Floor	Yes <input type="checkbox"/>	No <input type="checkbox"/>	MOD Form 2210

DESCRIPTION AND EXTENT OF THE INSTALLATION		Tick boxes as appropriate		
Description of installation:			New Installation	<input type="checkbox"/>
Extent of installation covered by this certificate:			Addition to an existing Installation	<input type="checkbox"/>
(Use continuation sheet if necessary) see continuation sheet _____			Alteration to an existing installation	<input type="checkbox"/>

FOR DESIGN
 I/We being the person(s) responsible for the design of the **electrical installation**, and/or **lightning protection system**, and/or **conducting/antistatic floor** (delete as appropriate) installation (as indicated by my/our signatures below), particulars of which are described above, having reasonable skill and care when carrying out the design hereby CERTIFY that the design work for which I/we have been responsible is to the best of my/our knowledge and belief in accordance with **JSP482 Chapter 8** and **BS7671** and/or **BS EN 62305** and/or **BS EN 60079** (delete or leave as appropriate), to _____ (date) except for the departures, if any as follows:

The extent of liability of the signatories is limited to the work described above as the subject of this Certificate
 For the DESIGN of the installation:

Signature:	Date:	Name (IN BLOCK LETTERS):	Designer No 1
Signature:	Date:	Name (IN BLOCK LETTERS):	Designer No 2 (If applicable)

FOR CONSTRUCTION
 I/We being the person(s) responsible for the construction of the **electrical installation** and/or **lightning protection system** and/or **conducting/antistatic floor** (delete as appropriate) installation (as indicated by my/our signatures below), particulars of which are described above, having reasonable skill and care when carrying out the construction hereby CERTIFY that the construction work for which I/we have been responsible is to the best of my/our knowledge and belief in accordance with **JSP482 Chapter 8** and **BS7671** and/or **BS EN 62305** and/or **BS EN 60079** (delete or leave as appropriate), to _____ (date) except for the departures, if any as follows:

Site:	Building:		
The extent of liability of the signatories is limited to the work described above as the subject of this Certificate For the CONSTRUCTION of the installation:			
Signature:	Date:	Name (IN BLOCK LETTERS):	Constructor
FOR INSPECTION & TESTING			
I/We being the person(s) responsible for the inspection and testing of the electrical installation , and/or lightning protection system , and/or conducting/antistatic floor (delete as appropriate) installation (as indicated by my/our signatures below), particulars of which are described above, having reasonable skill and care when carrying out the inspection and testing hereby CERTIFY that the inspection and testing for which I/we have been responsible is to the best of my/our knowledge and belief in accordance with JSP482 Chapter 8 and BS7671 and/or BS EN 62305 and/or BS EN 60079 (delete or leave as appropriate), to _____ (date) except for the departures, if any as follows:			
The extent of liability of the signatories is limited to the work described above as the subject of this Certificate For the INSPECTION AND TESTING of the installation:			
Signature:	Date:	Name (IN BLOCK LETTERS):	Inspector
PARTICULARS OF SIGNATORIES TO THIS INITIAL VERIFICATION CERTIFICATE			
Designer (No 1)	Installation:		
	Name:	Company:	
	Address:	Post Code:	Tel No:
Designer (No 2) (if applicable)	Installation:		
	Name:	Company:	
	Address:	Post Code:	Tel No:
Constructor	Installation:		
	Name:	Company:	
	Address:	Post Code:	Tel No:
Inspector (Tester)	Installation:		
	Name:	Company:	
	Address:	Post Code:	Tel No:

Site:		Building:	
Quality Assurance Inspector	Installation:		
	Name:	Company:	
	Address:	Post Code:	Tel No:

AVAILABILITY OF SUPPORTING DOCUMENTATION

REFERENCE	SUPPORTING DOCUMENTATION	AVAILABLE (tick all that apply)		CONTACT*
	As-Built Drawings	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
	Explosive Protection Document (applicable to Cat A/B Facilities)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
	Other (specify)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	

* Details of person(s) responsible for the upkeep of these documents

NOTES:

1. This Certificate is valid only when the applicable MOD Forms are attached
2. Where more than one new installation for a PES is concerned, and different contractors are used to design, install and test each of those installations (e.g. electrical installation, LPS, conducting/antistatic floor), separate initial verification certificates shall be issued for each installation.
3. For LPS, this certificate is to be completed for new installations and additions to existing LPS which physically alters the current installation, and necessitates a change to the LPS drawing.
4. The 'Installation' to be recorded refers to the particular installation which this certificate applies to e.g. electrical, LPS or conducting/antistatic floor

INITIAL VERIFICATION CERTIFICATE GUIDANCE FOR RECIPIENTS

1. This safety Certificate has been issued to confirm that the electrical installation work to which it relates has been designed, constructed, inspected and tested in accordance with JSP482 Chapter 8 and BS7671 and/or BS EN 62305 and/or BS EN 60079 (delete as appropriate), to _____ (date).
2. You should have received an "original" Certificate and the contractor should have retained a duplicate. 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.
3. The "original" Certificate should be retained in the PES Logbook and be shown to any person inspecting or undertaking further work on the electrical installation in the future. 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 project health and safety documentation.
4. This Certificate is intended to be issued only for a new electrical installation or for new work associated with an addition or alteration to an existing installation. It should not have been issued for the inspection of an existing electrical installation. A "Periodic Installation Condition Report" (MOD Form 2203) should be issued for such an inspection.

MOD FORM 2202

MINOR INSTALLATION WORKS CERTIFICATE

Site:	Building:		
THE FOLLOWING JOB(S) IS/ARE APPLICABLE TO THIS CERTIFICATE			
JOB DESCRIPTION	APPLICABLE		COMPLETE
Electrical Installation - Minor Installation Works	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Parts 1, 2, 3, 5 & 6
Lightning Protection Systems - Minor Installation Works <small>[See Note a]</small>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Parts 1, 4, 5 & 6
Conducting and Anti-Static Floor - Minor Installation Works <small>[See Note b]</small>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Parts 1, 5, 6 & MOD Form 2210
PART 1: Description of minor works			
a. Description of the minor works:			
b. Date minor works completed:			
c. Details of departures, if any from JSP482, BS7671, BS 62305 or BS EN 60079 (delete as appropriate):			
PART 2: Installation details			
a. System earthing arrangement ¹ : TN-S <input type="checkbox"/> TT <input type="checkbox"/> TN-C <input type="checkbox"/> TN-C-S <input type="checkbox"/> IT <input type="checkbox"/> (tick which applies)			
b. Method of fault protection: _____			
c. Protective device for the modified circuit: _____ Type: _____ Rating: _____ A			
d. Comments on existing installation, including adequacy of earthing and bonding arrangements (see BS7671):			
PART 3: Essential Electrical Tests			
a. Circuit Reference:			
b. Earth continuity satisfactory <input type="checkbox"/>			
c. Insulation resistance:			
Line/neutral: _____ MΩ	Insulation resistance satisfactory <input type="checkbox"/>		
Line/earth: _____ MΩ	Insulation resistance satisfactory <input type="checkbox"/>		
Neutral/earth: _____ MΩ	Insulation resistance satisfactory <input type="checkbox"/>		
d. Earth fault loop impedance: _____ Ω	Earth fault loop impedance satisfactory <input type="checkbox"/>		
e. Polarity satisfactory <input type="checkbox"/>			

¹ In accordance with JSP482 Chapter 8 Earthing Systems are restricted to TN-S only. DOSG ST3a shall be consulted if any other earthing system is installed.

Site:	Building:
f. RCD/RCBO operation (if applicable). Rated residual operating current $I_{\Delta n}$ _____ mA and an operating time of _____ ms (at $I_{\Delta n}$)	
PART 4: Essential LPS Tests	
a. Isolated earth rod impedance (max 10 Ω multiplied by the number of earth rods, or groups in the earth termination network): _____ Ω	
b. System impedance with all rods connected (max 10 Ω): _____ Ω	
c. Resistance across bonds below 0.2 Ω ? <input type="checkbox"/>	
PART 5: Declaration	
I CERTIFY that the said works do not impair the safety of the existing installation, that the said works have been designed, constructed, inspected and tested in accordance with JSP482 Chapter 8 and BS7671:2008 and/or BS EN 62305:2011 and/or BS EN 60079 (delete or leave as appropriate), amended to _____(date) and that the said works, to the best of my/our knowledge and belief, at the time of my/our inspection, complied with JSP482 Chapter 8 and BS7671:2008 and/or BS EN 62305:2011 and/or BS EN 60079 (delete or leave as appropriate), except as detailed in Part 1 above	
Name:	Signature:
For and on behalf of:	Position:
Address:	Date:
PART 6: Quality Assurance	
I CERTIFY that I have reviewed the test results for the said works and am satisfied that they do not impair the safety of the existing installation, that the said works have been designed, constructed, inspected and tested in accordance with JSP482 Chapter 8 and BS7671:2008 and/or BS EN 62305:2011 and/or BS EN 60079 (delete or leave as appropriate), amended to _____(date) and that the said works, to the best of my/our knowledge and belief, at the time of my/our inspection, complied with JSP482 Chapter 8 and BS7671:2008 and/or BS EN 62305:2011 and/or BS EN 60079 (delete or leave as appropriate), except as detailed in Part 1 above	
Name:	Signature:
For and on behalf of:	Position:
Address:	Date:

Site:	Building:
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AVAILABILITY OF SUPPORTING DOCUMENTATION

REFERENCE	SUPPORTING DOCUMENTATION	AVAILABLE		CONTACT*
	As-Built Drawings	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
	Explosive Protection Document (applicable to Cat A/B Facilities)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
	Other (specify)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	

* Details of person(s) responsible for the upkeep of these documents

Note

a. Minor Works to the Lightning Protection System includes the replacement of faulty components, but not the installation of additional components which would alter the system configuration of the LPS, for which an Initial Verification Certificate shall be issued.

b. For Conducting or Antistatic Floors this Certificate is valid only if MOD Form 2210 is attached.

MINOR ELECTRICAL INSTALLATION WORKS CERTIFICATE GUIDANCE FOR RECIPIENTS

1. This Certificate has been issued to confirm that the electrical installation work to which it relates has been designed, constructed, inspected and tested in accordance with JSP482 Chapter 8 and BS7671 and/or BS EN 62305 and/or BS EN 60079 (delete as appropriate), to _____(date).
2. You should have received an “original” Certificate and the contractor should have retained a duplicate. If you were the person ordering the work, but not the owner of the installation, you should pass this Certificate, or a copy of it, to the owner. A separate Certificate should have been received for each existing circuit on which minor works have been carried out. This Certificate is not appropriate if you requested the contractor to undertake more extensive installation work, for which you should have received an Initial Verification Certificate (MOD Form 2201).
3. The 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.
4. The "original" Certificate should be retained in the PES Logbook and be shown to any person inspecting or undertaking further work on the electrical installation in the future.

MOD FORM 2203

PERIODIC INSTALLATION CONDITION REPORT

Site:	Building:		
THE FOLLOWING JOB(S) IS/ARE APPLICABLE TO THIS CERTIFICATE			
JOB DESCRIPTION	APPLICABLE (tick those that apply)		IN ADDITION TO THIS FORM COMPLETE
Electrical Installation - Visual Inspection only	Yes <input type="checkbox"/>	No <input type="checkbox"/>	MOD Form 2206/7 ¹
Electrical Installation - Inspection and Test	Yes <input type="checkbox"/>	No <input type="checkbox"/>	MOD Forms 2204 ² /06/07 ¹ /08
RCD Testing	Yes <input type="checkbox"/>	No <input type="checkbox"/>	MOD Form 2208
Lightning Protection Systems	Yes <input type="checkbox"/>	No <input type="checkbox"/>	MOD Form 2209
Conducting and Anti-Static Floor	Yes <input type="checkbox"/>	No <input type="checkbox"/>	MOD Form 2210
DETAILS OF THE INSTALLATION WHICH IS THE SUBJECT OF THIS REPORT			
Establishment Address:			
Building No:			
Estimated age of installation _____ years			
Evidence of additions/alterations Yes <input type="checkbox"/> No <input type="checkbox"/>			Date of last inspection (date): _____
EXTENT AND LIMITATIONS OF INSPECTION AND TESTING			
Extent of the installation covered by this report:			
Agreed limitations including the reasons:			
Agreed with:			
Operational limitations including the reasons (see page no _____)			
The inspection and testing detailed in this report and accompanying schedules have been carried out in accordance with BS 7671 (IET Wiring Regulations)/ BS EN 62305 (Lightning Protection Regulations)/ BS EN60079 (ATEX Equipment Maintenance Regulations), (DELETE AS APPROPRIATE) , as amended to:			
_____ (date)			
It should be noted that cables concealed within trunking and conduits, under floors, in roof spaces, and generally within the fabric of the building or underground, have not been inspected unless specifically agreed between the client and inspector prior to the inspection.			

¹ MOD Form 2207 is required for ATEX equipment installed within Category A, B & DSEAR Zones.

² MOD Form 2204 is required to be completed if the form is not present within the PES and ESTC Standard No 6 Log books.

Site:	Building:
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SUMMARY OF THE CONDITION OF THE INSTALLATION

General condition of the installation (in terms of electrical safety)

Overall assessment of the electrical installation in terms of its suitability for continued use

SATISFACTORY / UNSATISFACTORY* (Delete as appropriate)

*An unsatisfactory assessment indicates that dangerous (code C1) and/or potentially dangerous (code C2) conditions have been identified.

RECOMMENDATIONS

Where the overall assessment of the suitability of the installation for continued use above is stated as UNSATISFACTORY, I / we recommend that any observations classified as 'Danger present' (code C1) or 'Potentially dangerous' (code C2) are acted upon as a matter of urgency. Investigation without delay is recommended for observations identified as 'further investigation required'.

Observations classified as 'Improvement recommended' (code C3) should be given due consideration. Subject to the necessary remedial action being taken, I / we recommend that the installation is further inspected and tested by _____ (date)

DECLARATION

I/We, being the person(s) responsible for the inspection and testing of the electrical installation (as indicated by my/our signatures below), particulars of which are described above, having exercised reasonable skill and care when carrying out the inspection and testing, hereby declare that the information in this report, including the observations and the attached schedules, provides an accurate assessment of the condition of the electrical installation taking into account the stated extent and limitations specified in this report.

<p>Inspected and tested by:</p> <p>Name (Capitals):</p> <p>Signature:</p> <p>For/on behalf of:</p> <p>Position:</p> <p>Address:</p> <p>Post code:</p> <p>Date:</p>	<p>Report authorised for issue by:</p> <p>Name (Capitals):</p> <p>Signature:</p> <p>For/on behalf of:</p> <p>Position:</p> <p>Address:</p> <p>Post code:</p> <p>Date:</p>
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SCHEDULE(S)

_____ schedule(s) of inspection and _____ schedule(s) of test results are attached.

The attached schedule(s) are part of this document and this report is valid only when they are attached to it. The extent of liability of the signatories is limited to the work described above as the subject of this Certificate For the INSPECTION AND TESTING of the installation:

Signature: _____ Date: _____ Name (In BLOCK LETTERS): _____

Site:		Building:	
PARTICULARS OF SIGNATORIES TO THIS PERIODIC INSTALLATION CONDITION REPORT			
Inspector	Installation:		
	Name:	Company:	
	Address:	Post Code:	Tel No:
Quality Assurance Inspector³	Installation:		
	Name:	Company:	
	Address:	Post Code:	Tel No:
Head of Establishment or nominated Explosives Safety Representative	I, the Head of Establishment, or nominated explosives safety representative, have received the completed periodic condition certificate and report, and have been fully informed of the result of the inspection and test. ⁴		
	Signature:		
	Date:		
	Name (IN BLOCK CAPITALS):		

³ The QA inspector shall be a representative of the contractor, who is competent in the field of maintenance that this certificate refers to. They shall also be fully aware of the relevant requirements of JSP482 Chapter 8 and BS7671 / BS EN 62305 / BS EN 60079 as appropriate

⁴ If the installation is deemed unsatisfactory the HOE or nominated Explosives Safety Representative may permit the continued use of a building so long as the risk(s) are mitigated, and the relevant Inspector of Explosives notified

CONDITION REPORT GUIDANCE FOR RECIPIENTS

1. This document is valid only when the MOD Forms below are attached to it
2. This Report is an important and valuable document which must be retained for a minimum of 11 years.
3. The purpose of this Condition Report is to confirm, so far as reasonably practicable, whether or not the installation referred to in this report is in a satisfactory condition for continued service. The Report should identify any damage, deterioration, defects and/or conditions which may give rise to danger.
4. The person ordering the Report should have received the “original” Report and the inspector should have retained a duplicate.
5. The “original” Report should be retained in a safe place and be made available to any person inspecting or undertaking work on the electrical installation in the future. If the property is vacated, this Report will provide the new owner /occupier with details of the condition of the electrical installation at the time the Report was issued.
6. Where the installation incorporates a residual current device (RCD) there should be a notice at or near the device stating that it should be tested quarterly. For safety reasons it is important that this instruction is followed.
7. The Extent and Limitations should identify fully the extent of the installation covered by this Report and any limitations on the inspection and testing. The inspector should have agreed these aspects with the person ordering the Report and with other interested parties (licensing authority, insurance company, mortgage provider and the like) before the inspection was carried out.
8. Some operational limitations such as inability to gain access to parts of the installation or an item of equipment may have been encountered during the inspection. The inspector should have noted these in the remedial action form.
9. For items classified as **C1 (“Danger present”)**, the safety of those using the installation is at risk, and it is recommended that a competent person undertakes the necessary remedial work immediately.
10. For items classified as **C2 (“Potentially dangerous”)**, the safety of those using the installation may be at risk and it is recommended that a competent person undertakes the necessary remedial work as a matter of urgency.
11. Where it has been stated that an observation requires further investigation the inspection has revealed an apparent deficiency which could not, due to the extent or limitations of the inspection, be fully identified. Such observations should be investigated as soon as possible. A further examination of the installation will be necessary, to determine the nature and extent of the apparent deficiency.
12. The "original" Certificate should be retained in the PES Logbook and be shown to any person inspecting or undertaking further work on the electrical installation in the future.

MOD FORM 2204

ELECTRICAL SUPPLY CHARACTERISTICS

Site: _____	Building: _____
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SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS tick boxes and enter details as appropriate

Earthing arrangements ⁽¹⁾	Number and Type of Live Conductors	Nature of Supply Parameters	Supply Protective Device Characteristics
TN-C <input type="checkbox"/>	a.c. <input type="checkbox"/> d.c. <input type="checkbox"/>	Nominal Voltage, U/U _o ⁽²⁾ _____ V	Type: _____ Rated Current _____ A
TN-S <input type="checkbox"/>			
TN-C-S <input type="checkbox"/>	1-phase, 2 wire <input type="checkbox"/> 2-wire <input type="checkbox"/>	Nominal frequency, f ⁽²⁾ _____ Hz	
TT <input type="checkbox"/>	2 phase, 3 wire <input type="checkbox"/> 3-wire <input type="checkbox"/>	Prospective Fault Current, I _{pf} ⁽³⁾ _____ kA	
IT <input type="checkbox"/>	3 phase, 3 wire <input type="checkbox"/> other <input type="checkbox"/>	External fault Loop Impedance, Z _e ⁽³⁾ _____ Ω	
Other sources of supply (to be detailed on attached schedule) <input type="checkbox"/>	3 phase, 4 wire <input type="checkbox"/> Confirmation of supply polarity <input type="checkbox"/>		

PARTICULARS OF INSTALLATION REFERRED TO IN THE CERTIFICATE

Means of Earthing	Maximum Demand						
Distributor's facility <input type="checkbox"/>	Maximum demand (load) _____ kVA/Amps <small>Delete as Appropriate</small>						
Installation earth electrode <input type="checkbox"/>	<p style="text-align: center;">Details of Installation Earth Electrode <small>(where applicable)</small></p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%; text-align: center;">Type (e.g. rod(s), tape etc)</td> <td style="width:33%; text-align: center;">Location</td> <td style="width:33%; text-align: center;">Electrode Resistance to Earth</td> </tr> <tr> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____ Ω</td> </tr> </table>	Type (e.g. rod(s), tape etc)	Location	Electrode Resistance to Earth	_____	_____	_____ Ω
Type (e.g. rod(s), tape etc)	Location	Electrode Resistance to Earth					
_____	_____	_____ Ω					

MAIN PROTECTIVE CONDUCTORS

Earthing Conductor Material: _____	Csa _____ mm ²	Continuity and connection verified <input type="checkbox"/>
Main Protective Bonding Conductors Material: _____	Csa _____ mm ²	Continuity and connection verified <input type="checkbox"/>
To Incoming water and/or gas service <input type="checkbox"/>	To LPS <input type="checkbox"/>	To other elements _____

¹ In accordance with JSP482 Chapter 8 Earthing Systems are restricted to TN-S only. DOSG ST3a shall be consulted if any other earthing system is installed.

² By enquiry

³ By enquiry or measurement

Site:	Building:	
MAIN SWITCH OR CIRCUIT-BREAKER		
BS, Type and No. of Poles	Current rating _____A	Voltage Rating _____ V
Location	Fuse rating or setting _____A	
Rated Residual Operating Current $I_{\Delta n}$ _____ mA, and operating time of _____ mS (at $I_{\Delta n}$) <small>(applicable only where an RCD is used as a main circuit-breaker)</small>		
COMMENTS ON EXISTING INSTALLATION		
In the case of an addition or alteration see Section 633 of BS7671:2008 (2011):		
SCHEDULES		
The attached schedules are part of this document and this certificate is valid only when they are attached to it. _____ Schedule of Inspections and _____ Schedules of test Results are attached. <small>(enter quantities of schedules attached)</small>		
QUALITY ASSURANCE		
I hereby certify that the information regarding electrical supply characteristics for the specified building contained in this MOD FORM 2204 is correct to the best of my knowledge and compliant with the relevant regulations.		
Name (BLOCK CAPITALS):		
Signature:		
Date:		

MOD FORM 2205

SCHEDULE OF INSPECTIONS (For New Installations Only)

Site:	Building:
<u>Methods of protection against electric shock</u>	<u>Prevention of mutual detrimental influence</u>
Both basic and fault protection:	<input type="checkbox"/> (a) Proximity to non-electrical services and other influences
<input type="checkbox"/> (i) SELV	<input type="checkbox"/> (b) Segregation of Band I and II circuits or use of Band II insulation
<input type="checkbox"/> (ii) PELV	<input type="checkbox"/> (c) Segregation of safety circuits
<input type="checkbox"/> (iii) Double insulation	<u>Identification</u>
<input type="checkbox"/> (iv) Reinforced insulation	<input type="checkbox"/> (a) Presence of diagrams, instructions, circuit charts and similar information
Basic Protection:	<input type="checkbox"/> (b) Presence of danger notices and other warning notices, including that they are securely fixed, durable and legible
<input type="checkbox"/> (i) Insulation of live parts	<input type="checkbox"/> (c) Labelling of protective devices, switches and terminals
<input type="checkbox"/> (ii) Barriers or enclosures	<input type="checkbox"/> (d) Identification of conductors
<input type="checkbox"/> (iii) Obstacles	<input type="checkbox"/> (e) Fitted at the point of connection to every earthing conductor, and earth electrode, the main equipotential bonding and the points of every bonding conductor to every extraneous conductive part.
<input type="checkbox"/> (iv) Placing out of reach	<u>Cables and conductors</u>
Fault Protection:	<input type="checkbox"/> Selection of conductors for current-carrying capacity and voltage drop
(i) Automatic disconnection of supply:	<input type="checkbox"/> Erection methods
<input type="checkbox"/> Presence of earthing conductor	<input type="checkbox"/> Routing of cables in prescribed zones
<input type="checkbox"/> Presence of circuit protective conductors	<input type="checkbox"/> Cables incorporating earthed armour or sheath, or run within an earthed wiring system, or otherwise adequately protected against nails, screws and the like
<input type="checkbox"/> Presence of protective bonding conductors	<input type="checkbox"/> Additional protection provided by 30mA RCD for cables concealed in walls (where required in premises not under the supervision of a skilled or instructed person)
<input type="checkbox"/> Presence of supplementary bonding conductors	<input type="checkbox"/> Connection of conductors
<input type="checkbox"/> Presence of earthing arrangements for combined protective and functional purposes	<input type="checkbox"/> Presence of fire barriers, suitable seals and protection against thermal effects
<input type="checkbox"/> Presence of adequate arrangements for other sources, where applicable	<u>General</u>
<input type="checkbox"/> FELV	<input type="checkbox"/> Presence and correct location of appropriate devices for isolation and switching
<input type="checkbox"/> Choice and setting of protective and monitoring devices (for fault and/or overcurrent protection)	<input type="checkbox"/> Adequacy of access to switchgear and other equipment
(ii) Non-conducting location:	<input type="checkbox"/> Particular protective measures for special installations and locations
<input type="checkbox"/> Absence of protective conductors	<input type="checkbox"/> Connection of single-pole devices for protection or switching in line conductors only ¹
(iii) Earth-free local equipotential bonding:	
<input type="checkbox"/> Presence of earth-free local equipotential bonding	
(iv) Electrical separation:	
<input type="checkbox"/> Provided for one item of current-using equipment	
<input type="checkbox"/> Provided for more than one item of current-using equipment	

¹ Single pole switches are not allowed in accordance with JSP482 Chapter 8 and if found shall be replaced with alternatives which disconnect each live conductor.

Site:	Building:
Additional protection:	General (Cont.)
<input type="checkbox"/> Presence of residual current device(s)	<input type="checkbox"/> Correct connection of accessories and equipment
<input type="checkbox"/> Presence of supplementary bonding conductors	<input type="checkbox"/> Presence of undervoltage protective devices
	<input type="checkbox"/> Selection of equipment and protective measures appropriate to external influences
	<input type="checkbox"/> Selection of appropriate functional switching devices
<u>Functioning and Condition</u>	
Correct Functioning of :	
<input type="checkbox"/> (i) Circuit Breakers	<input type="checkbox"/> (vii) Meters
<input type="checkbox"/> (ii) RCD	<input type="checkbox"/> (viii) Instruments
<input type="checkbox"/> (iii) Relays	Condition:
<input type="checkbox"/> (iv) Switches	<input type="checkbox"/> (i) Tightness of all Connections, including integrity of main and supplementary bonding.
<input type="checkbox"/> (v) Push Buttons	<input type="checkbox"/> (ii) Integrity of locks and seals
<input type="checkbox"/> (vi) Contactors	
QUALITY ASSURANCE	
I hereby certify that the information for the specified building contained in this MOD FORM 2205 is correct to the best of my knowledge and compliant with the relevant regulations.	
Name (BLOCK CAPITALS):	
Signature:	
Date:	

Notes:

✓ to indicate an inspection has been carried out and the result is satisfactory

N/A to indicate that the inspection is not applicable to a particular item

An entry must be made in every box

1. SELV An extra-low voltage system which is electrically separated from Earth and from other systems. The particular requirements of the Regulations must be checked (see BS7671 Regulations 414)
2. Method of basic protection - will include measurement of distances where appropriate
3. Obstacles - only adopted in special circumstances (see BS7671 Regulations 417.1 and 417.2)
4. Placing out of reach - only adopted in special circumstances (see BS7671 Regulations 417.1 and 417.3)
5. Non-conducting locations - not applicable in domestic premises and requiring special precautions (see BS7671 Regulation 418.1)
6. Earth-free local equipotential bonding - not applicable in domestic premises, only used in special circumstances (see BS7671 Regulation 418.2)
7. Electrical separation (see BS7671 Section 413 and Regulation 418.3)

ELECTRICAL INSTALLATION PERIODIC VISUAL INSPECTION RECORD SHEETS

Site:					Building:							
OUTCOMES	Acceptable condition	✓	Unacceptable condition	State C1 or C2	Improvement recommended	State C3	Not verified	N/V	Limitation	LIM	Not applicable	N/A
ITEM NO	DESCRIPTION							OUTCOME (Use codes above. Provide additional comment where appropriate. C1, C2 and C3 coded items to be recorded in Section K of the Condition Report)			Further investigation required? (Y or N)	
1.0	DISTRIBUTOR'S / SUPPLY INTAKE EQUIPMENT											
1.1	Service cable condition											
1.2	Condition of service head											
1.3	Condition of tails - Distributor											
1.4	Condition of tails - Consumer											
1.5	Condition of metering equipment											
1.6	Condition of isolator (where present)											
2.0	PRESENCE OF ADEQUATE ARRANGEMENTS FOR OTHER SOURCES SUCH AS MICRO GENERATORS (551.6; 551.7)											
3.0	EARTHING / BONDING ARRANGEMENTS (411.3; Chap 54)											
3.1	Presence and condition of distributor's earthing arrangement (542.1.2.1; 542.1.2.2)											
3.2	Presence and condition of earth electrode connection where applicable (542.1.2.3)											
3.3	Provision of earthing / bonding labels at all appropriate locations (514.13)											
3.4	Confirmation of earthing conductor size (542.3; 543.1.1)											
3.5	Accessibility and condition of earthing conductor at MET (543.3.2)											
3.6	Confirmation of main protective bonding conductor sizes (544.1)											
3.7	Condition and accessibility of main protective bonding conductor connections (543.3.2; 544.1.2)											
3.8	Accessibility and condition of all protective bonding connections (543.3.2)											
4.0	CONSUMER UNIT(S) / DISTRIBUTION BOARD(S)											
4.1	Adequacy of working space / accessibility to consumer unit / distribution board (132.12; 513.1)											
4.2	Security of fixing (134.1.1)											
4.3	Condition of enclosure(s) in terms of IP rating etc (416.2)											
4.4	Condition of enclosure(s) in terms of fire rating etc (526.5)											
4.5	Enclosure not damaged/deteriorated so as to impair safety (621.2(iii))											
4.6	Presence of main linked switch (as required by 537.1.4)											
4.7	Operation of main switch (functional check) (612.13.2)											
4.8	Manual operation of circuit-breakers and RCDs to prove disconnection (612.13.2)											
4.9	Correct identification of circuit details and protective devices (514.8.1; 514.9.1)											
4.10	Presence of RCD quarterly test notice at or near consumer unit / distribution board (514.12.2)											
4.11	Presence of non-standard (mixed) cable colour warning notice at or near consumer unit /distribution board (514.14)											

Inspected by:

Name (Capitals)

Signature

Date

Site:		Building:	
4.12	Presence of alternative supply warning notice at or near consumer unit / distribution board (514.15)		
4.13	Presence of other required labelling (please specify) (Section 514)		
4.14	Examination of protective device(s) and base(s); correct type and rating (no signs of unacceptable thermal damage, arcing or overheating) (421.1.3)		
4.15	Single-pole protective devices in line conductor only (132.14.1; 530.3.2)		
4.16	Protection against mechanical damage where cables enter consumer unit / distribution board(522.8.1; 522.8.11)		
4.17	Protection against electromagnetic effects where cables enter consumer unit / distribution board /enclosures (521.5.1)		
4.18	RCD(s) provided for fault protection – includes RCBOs (411.4.9; 411.5.2; 531.2)		
4.19	RCD(s) provided for additional protection - includes RCBOs (411.3.3; 415.1)		
5.0	FINAL CIRCUITS		
5.1	Identification of conductors (514.3.1)		
5.2	Cables correctly supported throughout their run (522.8.5)		
5.3	Condition of insulation of live parts (416.1)		
5.4	Non-sheathed cables protected by enclosure in conduit, ducting or trunking (521.10.1)		
	<ul style="list-style-type: none"> ▪ To include the integrity of conduit and trunking systems (metallic and plastic) 		
5.5	Adequacy of cables for current-carrying capacity with regard for the type and nature of installation (Section 523)		
5.6	Coordination between conductors and overload protective devices (433.1; 533.2.1)		
5.7	Adequacy of protective devices: type and rated current for fault protection (411.3)		
5.8	Presence and adequacy of circuit protective conductors (411.3.1.1; 543.1)		
5.9	Wiring system(s) appropriate for the type and nature of the installation and external influences (Section 522)		
5.10	Concealed cables installed in prescribed zones (see Section D. Extent and limitations) (522.6.101)		
5.11	Concealed cables incorporating earthed armour or sheath, or run within earthed wiring system, or otherwise protected against mechanical damage from nails, screws and the like (see Section D. Extent and limitations) (522.6.101; 522.6.103)		
5.12	Provision of additional protection by RCD not exceeding 30 Ma:		
	<ul style="list-style-type: none"> ▪ for all socket-outlets provided for use within an electrostatic protected area. ▪ for supply to mobile equipment not exceeding 32 A rating for use outdoors (411.3.3) ▪ for cables concealed in walls or partitions (522.6.102; 522.6.103) 		
5.13	Provision of fire barriers, sealing arrangements and protection against thermal effects (Section 527)		
5.14	Band II cables segregated / separated from Band I cables (528.1)		
5.15	Cables segregated / separated from communications cabling (528.2)		
5.16	Cables segregated / separated from non-electrical services (528.3)		
5.17	Termination of cables at enclosures – indicate extent of sampling in Section D of the report (Section 526)		
	<ul style="list-style-type: none"> ▪ Connections soundly made and under no undue strain (526.6) ▪ No basic insulation of a conductor visible outside enclosure (526.8) ▪ Connections of live conductors adequately enclosed (526.5) ▪ Adequately connected at point of entry to enclosure (glands, bushes etc.) (522.8.5) 		
5.18	Condition of accessories including socket-outlets, switches and joint boxes (621.2(iii))		

Inspected by:

Name (Capitals)

Signature

Date

Site:	Building:		
5.19	Suitability of accessories for external influences (512.2)		
6.0	LOCATION(S) CONTAINING A BATH OR SHOWER		
6.1	Additional protection for all low voltage (LV) circuits by RCD not exceeding 30 Ma (701.411.3.3)		
6.2	Where used as a protective measure, requirements for SELV or PELV met (701.414.4.5)		
6.3	Shaver sockets comply with BS EN 61558-2-5 formerly BS 3535 (701.512.3)		
6.4	Presence of supplementary bonding conductors, unless not required by BS 7671:2008 (701.415.2)		
6.5	Low voltage (e.g. 230 volt) socket-outlets sited at least 3 m from zone 1 (701.512.3)		
6.6	Suitability of equipment for external influences for installed location in terms of IP rating (701.512.2)		
6.7	Suitability of equipment for installation in a particular zone (701.512.3)		
6.8	Suitability of current-using equipment for particular position within the location (701.55)		
7.0	OTHER PART 7 SPECIAL INSTALLATIONS OR LOCATIONS		
7.1	List all other special installations or locations present, if any. (Record separately the results of particular inspections applied.)		
8.0	GENERAL		
8.1	Presence and correct location of appropriate devices for isolation and switching		
8.2	Adequacy of access to switchgear and other equipment		
8.3	Particular protective measures for special installations and locations		
8.4	Connection of single pole devices for protection in line/phase conductors only		
8.5	Correct connection of accessories and equipment		
8.6	Presence of undervoltage protective devices		
8.7	Selection of equipment and protective measures appropriate to external influences		
8.8	Selection of appropriate functional switching devices		
8.9	Unauthorised modifications		
8.10	Presence of diagrams, instructions, circuit charts and similar information		
8.11	Presence of danger notices and other warning notices, including that they are securely fixed, durable and legible		
8.12	Labelling of protective devices, switches and terminals		
8.13	Identification of conductors		
8.14	Required labels fitted at the point of connection to every earthing conductor, and earth electrode, the main equipotential bonding and the points of every bonding conductor to every extraneous conductive part.		
8.15	Correct Functioning of Circuit Breakers		
8.16	Correct Functioning of Relays		
8.17	Correct Functioning of Switches		
8.18	Correct Functioning of Push Buttons		
8.19	Correct Functioning of Contactors		
8.20	Correct Functioning of Meters		
8.21	Correct Functioning of Instruments		
8.22	Tightness of all Connections, including integrity of main and supplementary bonding.		
8.23	Integrity of locks and seals		

Note: Numbers in brackets are reference to BS7671:2008(2011)

Inspected by:

Name (Capitals)

Signature

Date

Page.....of.....

VISUAL, CLOSE & DETAILED INSPECTIONS SPECIFIC TO CATEGORY A, B AND DSEAR ZONES

Site:	Building:
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CATEGORY A & DSEAR ZONES 0, 1 and 2 - VISUAL INSPECTION

Check that:	Ex "d"	Ex "e"	Ex "n"	Ex "i" & "nL"	Ex "p"
EQUIPMENT					
Equipment is appropriate to the EPL/Zone requirements of the location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Circuit and/or equipment documentation is appropriate to the EPL/zone requirements of the location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment circuit identification is available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Installation is clearly labelled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enclosure, glass(es) parts and glass-to-metal sealing gaskets and/or compounds are satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There are no visible unauthorised modifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bolts, cable entry devices (direct and indirect) and blanking elements are of the correct type and are complete and tight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- visual check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safety barrier units, relays and other energy limiting devices are of the approved type, installed in accordance with the certification requirements and securely earthed where required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
INSTALLATION					
There is no obvious damage to cables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sealing of trunking, ducts, pipes and/or conduits is satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earthing connections, including any supplementary earthing bonding connections are satisfactory (for example connections are tight and conductors are of sufficient cross-section)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- physical check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- visual check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earth connections maintain the integrity of the type of protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ducts, pipes and enclosures are in good condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protective gas is substantially free from contaminants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protective gas pressure and/or flow is adequate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Obstructions adjacent to flameproof flanged joints are in accordance with IEC 60079-14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ENVIRONMENT					
Equipment is adequately protected against corrosion, weather, vibration and other adverse factors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No undue accumulation of dust and dirt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No undue external accumulation of dust and dirt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note 1: The checks used for equipment using both types of protection "e" and "d" will be a combination of both columns.
 Note 2: Account shall be taken of the possibility of an explosive atmosphere in the vicinity of the equipment when using electrical test equipment.

Inspected by:
 Name (Capitals)
 Signature
 Date

Enter the following symbols against the test as appropriate
 ✓ To indicate an inspection has been carried out and the result is satisfactory
 X To indicate an inspection was unsatisfactory
 N/A To indicate an inspection is not applicable

Site:	Building:
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CATEGORY B & DSEAR ZONES 20, 21 and 22 - VISUAL INSPECTION

Check that:	Ex "iD"	Ex "pD"	Ex "tD"
EQUIPMENT			
Equipment is appropriate to the EPL/Zone requirements of the location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Circuit and/or equipment documentation is appropriate to the EPL/zone requirements of the location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IP grade of equipment is appropriate to conductivity of dust	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment circuit identification is available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enclosure, glass(es) parts and glass-to-metal sealing gaskets and/or compounds are satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There are no unauthorized modifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There are no visible unauthorised modifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bolts, cable entry devices (direct and indirect) and blanking elements are of the correct type and are complete and tight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- visual check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safety barrier units, relays and other energy limiting devices are of the approved type, installed in accordance with the certification requirements and securely earthed where required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
INSTALLATION			
The installation is such as to minimise the risk of dust accumulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is no obvious damage to cables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sealing of trunking, ducts, pipes and/or conduits is satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earthing connections, including any supplementary earthing bonding connections are satisfactory (for example connections are tight and conductors are of sufficient cross-section)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- visual check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earth connections maintain the integrity of the type of protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ducts, pipes and enclosures are in good condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protective gas is substantially free from contaminants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protective gas pressure and/or flow is adequate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ENVIRONMENT			
Equipment is adequately protected against corrosion, weather, vibration and other adverse factors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No undue accumulation of dust and dirt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No undue external accumulation of dust and dirt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspected by:

Name (Capitals)

Signature

Date

Enter the following symbols against the test as appropriate

- ✓ To indicate an inspection has been carried out and the result is satisfactory
- X To indicate an inspection was unsatisfactory
- N/A To indicate an inspection is not applicable

Site:	Building:				
CATEGORY A & DSEAR ZONES 0, 1 and 2 - CLOSE INSPECTION (Page 1 of 2)					
Check that:	Ex "d"	Ex "e"	Ex "n"	Ex "i" & "nL"	Ex "p"
EQUIPMENT					
Equipment is appropriate to the EPL/Zone requirements of the location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Circuit and/or equipment documentation is appropriate to the EPL/zone requirements of the location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment group is correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment installed is that specified in the documentation - Fixed equipment only	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment temperature class is correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Circuit and/or equipment category and group correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment circuit identification is available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Installation is clearly labelled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enclosure, glass(es) parts and glass-to-metal sealing gaskets and/or compounds are satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There are no visible unauthorised modifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bolts, cable entry devices (direct and indirect) and blanking elements are of the correct type and are complete and tight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- physical check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safety barrier units, relays and other energy limiting devices are of the approved type, installed in accordance with the certification requirements and securely earthed where required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flange gap dimensions are within maximal values permitted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
INSTALLATION					
There is no obvious damage to cables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cable screens are earthed in accordance with the documentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sealing of trunking, ducts, pipes and/or conduits is satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earthing connections, including any supplementary earthing bonding connections are satisfactory (for example connections are tight and conductors are of sufficient cross-section)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- physical check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- visual check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earth connections maintain the integrity of the type of protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ducts, pipes and enclosures are in good condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protective gas is substantially free from contaminants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protective gas pressure and/or flow is adequate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Obstructions adjacent to flameproof flanged joints are in accordance with IEC 60079-14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Variable voltage/frequency installation in accordance with documentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspected by:

Name (Capitals)

Signature

Date

Enter the following symbols against the test as appropriate

- ✓ To indicate an inspection has been carried out and the result is satisfactory
- X To indicate an inspection was unsatisfactory
- N/A To indicate an inspection is not applicable

Site:	Building:				
CATEGORY A & DSEAR ZONES 0, 1 and 2 - CLOSE INSPECTION (Page 2 of 2)					
ENVIRONMENT	Ex "d"	Ex "e"	Ex "n"	Ex "i" & "nL"	Ex "p"
Equipment is adequately protected against corrosion, weather, vibration and other adverse factors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No undue accumulation of dust and dirt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No undue external accumulation of dust and dirt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note 1: The checks used for equipment using both types of protection "e" and "d" will be a combination of both columns.					
Note 2: Account shall be taken of the possibility of an explosive atmosphere in the vicinity of the equipment when using electrical test equipment.					

Inspected by:

Name (Capitals)

Signature

Date

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- N/A To indicate an inspection is not applicable

Site:	Building:
-------	-----------

CATEGORY A & DSEAR ZONES 0, 1 and 2 - DETAILED INSPECTION (Page 1 of 3)

Check that:					
EQUIPMENT	Ex "d"	Ex "e"	Ex "n"	Ex "i" & "nL"	Ex "p"
Equipment is appropriate to the EPL/Zone requirements of the location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Circuit and/or equipment documentation is appropriate to the EPL/zone requirements of the location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment group is correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment installed is that specified in the documentation - Fixed equipment only	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment temperature class is correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Circuit and/or equipment category and group correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment circuit identification is correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment circuit identification is available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Installation is clearly labelled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enclosure, glass(es) parts and glass-to-metal sealing gaskets and/or compounds are satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There are no unauthorized modifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bolts, cable entry devices (direct and indirect) and blanking elements are of the correct type and are complete and tight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- physical check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safety barrier units, relays and other energy limiting devices are of the approved type, installed in accordance with the certification requirements and securely earthed where required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flange faces are clean and undamaged and gaskets, if any, are satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electrical connections are tight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flange gap dimensions are within maximal values permitted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Printed circuit boards are clean and undamaged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lamp rating, type and position are correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electrical connections are tight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conditions of enclosure gaskets is satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enclosed-break and hermetically sealed devices are undamaged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restricted breathing enclosure is satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Motor fans have sufficient clearance to enclosure and/or covers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Breathing and draining devices are satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspected by:

Name (Capitals)

Signature

Date

Enter the following symbols against the test as appropriate

- ✓ To indicate an inspection has been carried out and the result is satisfactory
- X To indicate an inspection was unsatisfactory
- N/A To indicate an inspection is not applicable

Site:	Building:
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CATEGORY A & DSEAR ZONES 0, 1 and 2 - DETAILED INSPECTION (Page 2 of 3)

Check that:	Ex "d"	Ex "e"	Ex "n"	Ex "i" & "nL"	Ex "p"
INSTALLATION					
Type of cable is appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cables are installed in accordance with the documentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is no obvious damage to cables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cable screens are earthed in accordance with the documentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sealing of trunking, ducts, pipes and/or conduits is satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is no obvious damage to cables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stopping boxes and cable boxes are correctly filled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integrity of conduit system and interface with mixed system is maintained	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Point-to-point connections are all correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earthing connections, including any supplementary earthing bonding connections are satisfactory (for example connections are tight and conductors are of sufficient cross-section)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- physical check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earth continuity is satisfactory (e.g. connections are tight, conductors are of sufficient cross-section) for non-galvanised isolated circuits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fault loop impedance (TN systems) or earthing resistance (IT systems) is satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earth connections maintain the integrity of the type of protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protective gas inlet temperature is below maximum specified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation resistance is satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intrinsically safe circuit earthing and insulation resistance is satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ducts, pipes and enclosures are in good condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automatic electrical protective devices operate within permitted limits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Separation is maintained between intrinsically safe and non-intrinsically safe circuits in common distribution boxes or relay cubicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protective gas is substantially free from contaminants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automatic electrical protective devices are set correctly (auto-reset not possible)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
As applicable, short-circuit protection of the power supply is in accordance with the documentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protective gas pressure and/or flow is adequate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specific conditions of use (if applicable) are complied with	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pressure and/or flow indicators, alarms and interlocks function correctly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cables not in use are correctly terminated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conditions of spark and particle barriers of ducts for exhausting the gas in hazardous area are satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Obstructions adjacent to flameproof flanged joints are in accordance with IEC 60079-14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Variable voltage/frequency installation in accordance with documentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspected by:

Name (Capitals)

Signature

Date

Enter the following symbols against the test as appropriate

- ✓ To indicate an inspection has been carried out and the result is satisfactory
- X To indicate an inspection was unsatisfactory
- N/A To indicate an inspection is not applicable

Site:	Building:				
CATEGORY A & DSEAR ZONES 0, 1 and 2 - DETAILED INSPECTION (Page 3 of 3)					
Check that:	Ex "d"	Ex "e"	Ex "n"	Ex "i" & "nL"	Ex "p"
ENVIRONMENT					
Equipment is adequately protected against corrosion, weather, vibration and other adverse factors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No undue accumulation of dust and dirt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No undue external accumulation of dust and dirt				<input type="checkbox"/>	
Electrical insulation is clean and dry		<input type="checkbox"/>	<input type="checkbox"/>		
Note 1: The checks used for equipment using both types of protection "e" and "d" will be a combination of both columns.					
Note 2: Account shall be taken of the possibility of an explosive atmosphere in the vicinity of the equipment when using electrical test equipment.					

Inspected by:

Name (Capitals)

Signature

Date

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- ✓ To indicate an inspection has been carried out and the result is satisfactory
- X To indicate an inspection was unsatisfactory
- N/A To indicate an inspection is not applicable

Site:	Building:		
CATEGORY B & DSEAR ZONES 20, 21 and 22 - CLOSE INSPECTION			
Check that:	Ex "d"	Ex "e"	Ex "n"
EQUIPMENT			
Equipment is appropriate to the EPL/Zone requirements of the location		<input type="checkbox"/>	<input type="checkbox"/>
Circuit and/or equipment documentation is appropriate to the EPL/zone requirements of the location	<input type="checkbox"/>		
IP grade of equipment is appropriate to conductivity of dust			<input type="checkbox"/>
Equipment group is correct		<input type="checkbox"/>	
Equipment installed is that specified in the documentation - Fixed equipment only	<input type="checkbox"/>		
Equipment maximum surface temperature is correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Circuit and/or equipment category and group correct	<input type="checkbox"/>		
Equipment circuit identification is available		<input type="checkbox"/>	<input type="checkbox"/>
Installation is clearly labelled	<input type="checkbox"/>		
Enclosure, glass(es) parts and glass-to-metal sealing gaskets and/or compounds are satisfactory		<input type="checkbox"/>	<input type="checkbox"/>
There are no visible unauthorised modifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bolts, cable entry devices (direct and indirect) and blanking elements are of the correct type and are complete and tight			
- physical check			<input type="checkbox"/>
Safety barrier units, relays and other energy limiting devices are of the approved type, installed in accordance with the certification requirements and securely earthed where required	<input type="checkbox"/>		
INSTALLATION			
The installation is such as to minimise the risk of dust accumulations			<input type="checkbox"/>
There is no obvious damage to cables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sealing of trunking, ducts, pipes and/or conduits is satisfactory	<input type="checkbox"/>		<input type="checkbox"/>
Earthing connections, including any supplementary earthing bonding connections are satisfactory (for example connections are tight and conductors are of sufficient cross-section)			
- visual check		<input type="checkbox"/>	<input type="checkbox"/>
Earth connections maintain the integrity of the type of protection	<input type="checkbox"/>		
Ducts, pipes and enclosures are in good condition		<input type="checkbox"/>	
Protective gas is substantially free from contaminants		<input type="checkbox"/>	
Protective gas pressure and/or flow is adequate		<input type="checkbox"/>	
Cables not in use are correctly terminated			<input type="checkbox"/>
ENVIRONMENT			
Equipment is adequately protected against corrosion, weather, vibration and other adverse factors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No undue accumulation of dust and dirt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note 1: The checks used for equipment using both types of protection "e" and "d" will be a combination of both columns.			
Note 2: Account shall be taken of the possibility of an explosive atmosphere in the vicinity of the equipment when using electrical test equipment.			

Inspected by:

Name (Capitals)

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REMEDIAL ACTIONS ARISING FROM CLOSE INSPECTIONS SPECIFIC TO CATEGORY B AND DSEAR ZONES 20, 21 & 22

Site:	Building:		
OBSERVATION	CLASSIFICATION CODE	RECOMMENDED REMEDIAL ACTION	Date of Action Complete

Inspected by:
 Name (Capitals)
 Signature
 Date

Classification Codes

Each observation relating to a concern about the safety of the installation shall be attributed an appropriate Classification Code selected from the standard codes C1, C2 and C3 as follows:

- Code C1 'Danger present' Risk of injury. Immediate remedial action required
- Code C2 'Potentially dangerous' Urgent remedial action required
- Code C3 'Improvement recommended'

If required the following inspections shall be carried out in addition to the visual and close inspections undertaken in Jobs 1 & 2

Site:	Building:		
CATEGORY B & DSEAR ZONES 20, 21 and 22 - DETAILED INSPECTION (Page 1 of 2)			
Check that:	Ex "iD"	Ex "pD"	Ex "tD"
EQUIPMENT			
Equipment is appropriate to the EPL/Zone requirements of the location		<input type="checkbox"/>	<input type="checkbox"/>
Circuit and/or equipment documentation is appropriate to the EPL/zone requirements of the location	<input type="checkbox"/>		
IP grade of equipment is appropriate to conductivity of dust			<input type="checkbox"/>
Equipment group is correct		<input type="checkbox"/>	
Equipment installed is that specified in the documentation - Fixed equipment only	<input type="checkbox"/>		
Equipment maximum surface temperature is correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Circuit and/or equipment category and group correct	<input type="checkbox"/>		
Equipment circuit identification is correct		<input type="checkbox"/>	<input type="checkbox"/>
Equipment circuit identification is available		<input type="checkbox"/>	<input type="checkbox"/>
Installation is clearly labelled	<input type="checkbox"/>		
Enclosure, glass(es) parts and glass-to-metal sealing gaskets and/or compounds are satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There are no unauthorized modifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There are no visible unauthorised modifications			<input type="checkbox"/>
Bolts, cable entry devices (direct and indirect) and blanking elements are of the correct type and are complete and tight			
- physical check			<input type="checkbox"/>
Safety barrier units, relays and other energy limiting devices are of the approved type, installed in accordance with the certification requirements and securely earthed where required	<input type="checkbox"/>		
Printed circuit boards are clean and undamaged	<input type="checkbox"/>		
Lamp rating, type and position are correct		<input type="checkbox"/>	<input type="checkbox"/>
Electrical connections are tight	<input type="checkbox"/>		<input type="checkbox"/>
Conditions of enclosure gaskets is satisfactory			<input type="checkbox"/>
Motor fans have sufficient clearance to enclosure and/or covers			<input type="checkbox"/>
Breathing and draining devices are satisfactory			
INSTALLATION			
The installation is such as to minimise the risk of dust accumulations			<input type="checkbox"/>
Type of cable is appropriate		<input type="checkbox"/>	<input type="checkbox"/>
Cables are installed in accordance with the documentation	<input type="checkbox"/>		
There is no obvious damage to cables		<input type="checkbox"/>	<input type="checkbox"/>
Cable screens are earthed in accordance with the documentation	<input type="checkbox"/>		
Sealing of trunking, ducts, pipes and/or conduits is satisfactory	<input type="checkbox"/>		<input type="checkbox"/>
There is no obvious damage to cables	<input type="checkbox"/>		

Inspected by:

Name (Capitals)

Signature

Date

Enter the following symbols against the test as appropriate

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X To indicate an inspection was unsatisfactory

N/A To indicate an inspection is not applicable

Site:	Building:
-------	-----------

CATEGORY B & DSEAR ZONES 20, 21 and 22 - DETAILED INSPECTION (Page 2 of 2)

Check that:	Ex "iD"	Ex "pD"	Ex "tD"
Point-to-point connections are all correct	<input type="checkbox"/>		
Earthing connections, including any supplementary earthing bonding connections are satisfactory (for example connections are tight and conductors are of sufficient cross-section)			
- physical check		<input type="checkbox"/>	<input type="checkbox"/>
Earth continuity is satisfactory (e.g. connections are tight, conductors are of sufficient cross-section) for non-galvanised isolated circuits	<input type="checkbox"/>		
Fault loop impedance (TN systems) or earthing resistance (IT systems) is satisfactory		<input type="checkbox"/>	<input type="checkbox"/>
Earth connections maintain the integrity of the type of protection	<input type="checkbox"/>		
Protective gas inlet temperature is below maximum specified		<input type="checkbox"/>	
Insulation resistance is satisfactory			<input type="checkbox"/>
Intrinsically safe circuit earthing and insulation resistance is satisfactory	<input type="checkbox"/>		
Ducts, pipes and enclosures are in good condition		<input type="checkbox"/>	
Automatic electrical protective devices operate within permitted limits		<input type="checkbox"/>	<input type="checkbox"/>
Separation is maintained between intrinsically safe and non-intrinsically safe circuits in common distribution boxes or relay cubicles	<input type="checkbox"/>		
Protective gas is substantially free from contaminants		<input type="checkbox"/>	
Automatic electrical protective devices are set correctly (auto-reset not possible)		<input type="checkbox"/>	
As applicable, short-circuit protection of the power supply is in accordance with the documentation	<input type="checkbox"/>		
Protective gas pressure and/or flow is adequate		<input type="checkbox"/>	
Specific conditions of use (if applicable) are complied with	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pressure and/or flow indicators, alarms and interlocks function correctly		<input type="checkbox"/>	
Cables not in use are correctly terminated	<input type="checkbox"/>		<input type="checkbox"/>
Conditions of spark and particle barriers of ducts for exhausting the gas in hazardous area are satisfactory		<input type="checkbox"/>	
ENVIRONMENT			
Equipment is adequately protected against corrosion, weather, vibration and other adverse factors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No undue accumulation of dust and dirt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note 1: The checks used for equipment using both types of protection "e" and "d" will be a combination of both columns.

Note 2: Account shall be taken of the possibility of an explosive atmosphere in the vicinity of the equipment when using electrical test equipment.

Inspected by:

Name (Capitals)

Signature

Date

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MOD FORM 2208

GENERIC SCHEDULE OF ELECTRICAL INSTALLATION TEST RESULTS

Site:	Building:
Installation Test Results - Page 1 of 4	

Distribution Board Details:

DB Reference Number	
Location	
Z_s at DB(Ω)	
I_{pf} at DB (kA)	
Correct Supply Polarity Confirmed? <input type="checkbox"/>	
Phase Sequence Confirmed (Where Appropriate)? <input type="checkbox"/>	

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

Details of test instruments used:

Serial / Asset Number	
Continuity	
Insulation Resistance	
Earth Fault Loop Impedance	
RCD	
Earth Electrode Resistance	
Impedance Measured	

Tested by:

Name (Block Capitals)	
Signature	
Date (DD/MM/YYYY)	

LIGHTNING PROTECTION SYSTEMS

Site:	Building:
-------	-----------

LIGHTNING PROTECTION SYSTEM SCHEMATIC

SHOW DIAGRAM OF LIGHTNING PROTECTION SYSTEM INCLUDING (WHERE APPLICABLE) EARTH ELECTRODES OR GROUPS OF EARTH ELECTRODES, RING CONDUCTORS, BONDS AND JOINTS, CONNECTIONS TO ANY OTHER BUILDING/FACILITY LIGHTNING PROTECTION SYSTEMS. (ALL EARTH ELECTRODES, BONDS AND JOINTS TO BE GIVEN A REFERENCE). IDENTIFY ALL MODIFICATIONS. FOR COMPLEX SYSTEMS SUPPORT THE DIAGRAM WITH REFERENCE TO AS-BUILT DRAWINGS IF AVAILABLE.

Inspected by:

Name (Capitals)

Signature

Date

VISUAL INSPECTION OF LIGHTNING PROTECTION SYSTEM

Site:	Building:
-------	-----------

General

<input type="checkbox"/>	(1) All visible conductors and system components are fastened to the mounting surfaces and components which provide mechanical protection are intact (functionally operational) and in the right place
<input type="checkbox"/>	(2) There is no indication of damage or corrosion to the LPS (including catenary pole base) , to SPDs or any failures of fuses which protect SPDs,
<input type="checkbox"/>	(3) All appropriate metallic items are adequately bonded to the LPS if within the safe separation 's' distance as described in BS EN62305-3
<input type="checkbox"/>	(4) Single earthing point to other earthing systems (eg. Electrical, static discharge, incoming pipe work, building steelwork etc)
<input type="checkbox"/>	(5) There have not been any additions or alterations to the protected structure which would require additional protection
<input type="checkbox"/>	(6) All visible earth connections are intact
<input type="checkbox"/>	(7) Correct equipotential bonding has been established for any new services or additions which have been made to the interior of the structure since the last inspection, and that continuity tests have been performed for these new additions,
<input type="checkbox"/>	(8) Bonding conductors and connections inside the structure are present and intact (functionally operational)
<input type="checkbox"/>	(9) Separation distances are maintained
<input type="checkbox"/>	(10) Bonding conductors, joints, shielding devices, cable routing and SPDs have been checked and tested.

Air Termination

<input type="checkbox"/>	(1) <u>Air termination conductors are positioned to protect vulnerable points, or where metallic roof is used as the air termination it is of satisfactory thickness to meet the requirements of BS EN 62305-3.</u>
<input type="checkbox"/>	(2) <u>Roof mesh air termination, if applicable, has correct dimensions and is in good condition (conductors must not be coated with a non-conductive material unless finials are provided which provide full coverage of roof area in accordance with 20m radius rolling sphere).</u>
<input type="checkbox"/>	(3) <u>Overhead catenary wire, if applicable has sufficient clearance (a minimum of 2m at any point) from building.</u>

Down Conductors

<input type="checkbox"/>	(1) Down conductors are adequate in number and correctly positioned
<input type="checkbox"/>	(2) Each down conductor has an associated earth electrode
<input type="checkbox"/>	(3) There are no doglegs or sharp bends in the down conductors

Earth Termination

<input type="checkbox"/>	(1) Earth electrodes are accessible for inspection and testing purposes
<input type="checkbox"/>	(2) Buried earth ring, or low level wall mounted ring fitted

Inspected by:

Name (Capitals)

Signature

Date

Enter the following symbols against the test as appropriate:

- ✓ To indicate an inspection has been carried out and the result is satisfactory
- X To indicate an inspection has been carried out and the result is unsatisfactory
- N/A To indicate an inspection is not applicable

INACCESSIBLE BONDS AND JOINTS

Site:		Building:	
LOCATION OF BONDS, JOINTS ETC (REFERENCED TO SCHEMATIC)		RESISTANCE (Ω)	SATISFACTORY?
TESTER MODEL AND SERIAL NUMBER			

Note: Test the electrical continuity of the conductors, bonds and joints which cannot be visually inspected

REBAR CONTINUITY

LOCATION OF TEST POINTS (REFERENCED TO SCHEMATIC)		RESISTANCE (Ω)	SATISFACTORY?
TESTER MODEL AND SERIAL NUMBER			

Note: Test the electrical continuity of the rebar at 10m intervals, in line with earth rods, if used as the LPS down conductor from air termination conductor to earth termination network.

Inspected by:

Name (Capitals)

Signature

Date

SYSTEM TESTING

Site:		Building:	
LOCATION OF TEST POINT		RESISTANCE (Ω)	SATISFACTORY?
TESTER MODEL AND SERIAL NUMBER			

Note: Resistance to earth of the LPS with all earth electrodes connected and all equipotential bonding in place to be measured from random points on the LPS. The number of random tests to be carried out shall be a min of 50% of the installed electrodes.

Inspected by:

Name (Capitals)

Signature

Date

Enter the following symbols against the test as appropriate:

✓ If the result is satisfactory

X To indicate that the result was unsatisfactory

ISOLATED ELECTRODE READING

Site:	Building:
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EARTH ELECTRODE TESTING¹

Soil Condition (✓ box)	<input type="checkbox"/> Wet <input type="checkbox"/> Moist <input type="checkbox"/> Dry	Number of Earth Electrodes or Groups of Electrodes																		
Earth Electrode Designation																				
Measured Resistance to earth of Each Electrode with all connections to LPS removed (Ω)																				
Earth Electrode Designation																				
Measured Resistance to earth of Each Electrode with all connections to LPS removed (Ω)																				
Earth Electrode Designation																				
Measured Resistance to earth of Each Electrode with all connections to LPS removed (Ω)																				
Earth Electrode Designation																				
Measured Resistance to earth of Each Electrode with all connections to LPS removed (Ω)																				
Tester Model and Serial Number																			

Note: For earth electrode testing of explosives buildings, only the Fall of Potential method is to be used. Where this is not practical, DOSG ST3a is to be contacted for further guidance.

Inspected by:

Name (Capitals)

Signature

Date

¹ For earth networks incorporating both vertical earth rods and a partial or full ring earth electrode, disconnection and testing should be performed at the earth inspection pit. If such inspection is difficult to perform, routine test should be completed by high frequency or impulse tests.

CONDUCTING & ANTI-STATIC FLOORS RECORD SHEET

Site:	Building:
Floor Type	
<input type="checkbox"/> Conducting	
<input type="checkbox"/> Antistatic	
Visual Inspection	
<input type="checkbox"/> (1) Visually inspect the floor for signs of wear, damage or contamination and identify affected areas	
<input type="checkbox"/> (2) Visually confirm the integrity of the equipotential bonding system including that it is routed to the common earth star point (MET) only (no supplementary connections to LPS)	
<input type="checkbox"/> (3) HAPTM is working correctly and positioned directly over floor	
<input type="checkbox"/> (4) Floor is earthed to the equipotential bonding (EPB) strip at a minimum of 2 places	
<input type="checkbox"/> (5) Visually check integrity of electrical bonding of benches, floors, chairs, trolleys, mats, workstations, separately grounded equipment and any other equipment that grounds an operator permanently or temporarily	
<input type="checkbox"/> (6) Socket outlets are RCD protected	
Equipotential Bonding/Static Discharge System	
Visually inspect the Static Discharge System and ensure it is:	
<input type="checkbox"/> (1) As low as possible on the walls (no higher than 500mm from ground level)	
<input type="checkbox"/> (2) Connected to the main earthing terminal with the electrical incomer sheath and other earth systems via the shortest possible length	
<input type="checkbox"/> (3) Not connected directly to the LPS, other than at the MET	
<input type="checkbox"/> (4) Run in as straight a line as possible with minimal bends and corners	
<input type="checkbox"/> (5) Where it is run over an opening, no bonding connections are made to it above the opening	
<input type="checkbox"/> (6) Securely fitted with tight connections	
<input type="checkbox"/> (7) <u>Free of deterioration, corrosion and damage</u>	
Static Discharge System Test	
<input type="checkbox"/> (1) Static Discharge Continuity Test Results (Ω)	
<input type="checkbox"/> (2) Earth electrode test	

Inspected by:

Name (Capitals)

Signature

Date

Enter the following symbols against the test as appropriate:

✓ To indicate an inspection has been carried out and the result is satisfactory

N/A To indicate an inspection is not applicable

C1, C2 or C3 – To indicate observations found

MOD FORM 2211

ELECTRICAL INSPECTION STATUS

Site:			Building:			
ELECTRICAL INSPECTION STATUS – CAT C & D FACILITIES ONLY						
ESTC STANDARD 6 MAINTENANCE ACTIVITIES						
	Inspection of Electrical Installation	Inspection & Test of Electrical Installation	RCD	Earth Electrode Test (TT Only)	LPS	Conducting/Antistatic Floor
Maximum period between tests	12 Monthly	24 Monthly	12 Monthly	11 Monthly	11 Monthly	12 Monthly
Date of Test & Initials:						
Next Test Due by:						
Date of Test & Initials:						
Next Test Due by:						
Date of Test & Initials:						
Next Test Due by:						
Date of Test & Initials:						
Next Test Due by:						
Date of Test & Initials:						
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Next Test Due by:						
Date of Test & Initials:						
Next Test Due by:						
Date of Test & Initials:						
Next Test Due by:						
Date of Test & Initials:						
Next Test Due by:						

Note 1: Score through columns which are not applicable to this building.

Note 2: If test not completed by due date, the HOE, licensing officer or explosives safety officer/representative is to be informed.

Site:				Building:				
ELECTRICAL INSPECTION STATUS CAT A, B AND DSEAR ZONES								
ESTC STANDARD 6 MAINTENANCE ACTIVITIES								
	Visual Inspection	Close Inspection	Detailed Inspection	Inspection & Test (Jobs 3, 5, 7 and 8)	Inspection & Test (Jobs 4, 6 and 10)	RCD	LPS	Conducting/ Anti-Static Floors
Maximum period between tests	6 Monthly	12 Monthly	36 Monthly	12 Monthly	36 Monthly	12 Monthly	11 Monthly	12 Monthly
Date of Test & Initials:								
Next test due date:								
Date of Test & Initials:								
Next test due date:								
Date of Test & Initials:								
Next test due date:								
Date of Test & Initials:								
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Next test due date:								
Date of Test & Initials:								
Next test due date:								
Date of Test & Initials:								
Next test due date:								

Note 1: Score through columns which are not applicable to this building.

Note 2: If test not completed by due date, the HOE, licensing officer or explosives safety officer/representative is to be informed.

MOD FORM 2212

RCD FUNCTIONAL CHECKS

Site:				Building:		
RCD INSPECTION – 3 MONTHLY FUNCTIONAL CHECKS						
ESTC STANDARD 6 MAINTENANCE ACTIVITIES						
RCD Ref:						
Date of Test & Initials:						
Result (sat/unsat):						
Next Test Due by:						
RCD Ref:						
Date of Test & Initials:						
Result (sat/unsat):						
Next Test Due by:						
RCD Ref:						
Date of Test & Initials:						
Result (sat/unsat):						
Next Test Due by:						
RCD Ref:						
Date of Test & Initials:						
Result (sat/unsat):						
Next Test Due by:						
RCD Ref:						
Date of Test & Initials:						
Result (sat/unsat):						
Next Test Due by:						

Note: If test is not completed by due date, the HOE, licensing officer or explosives safety officer/representative is to be informed.