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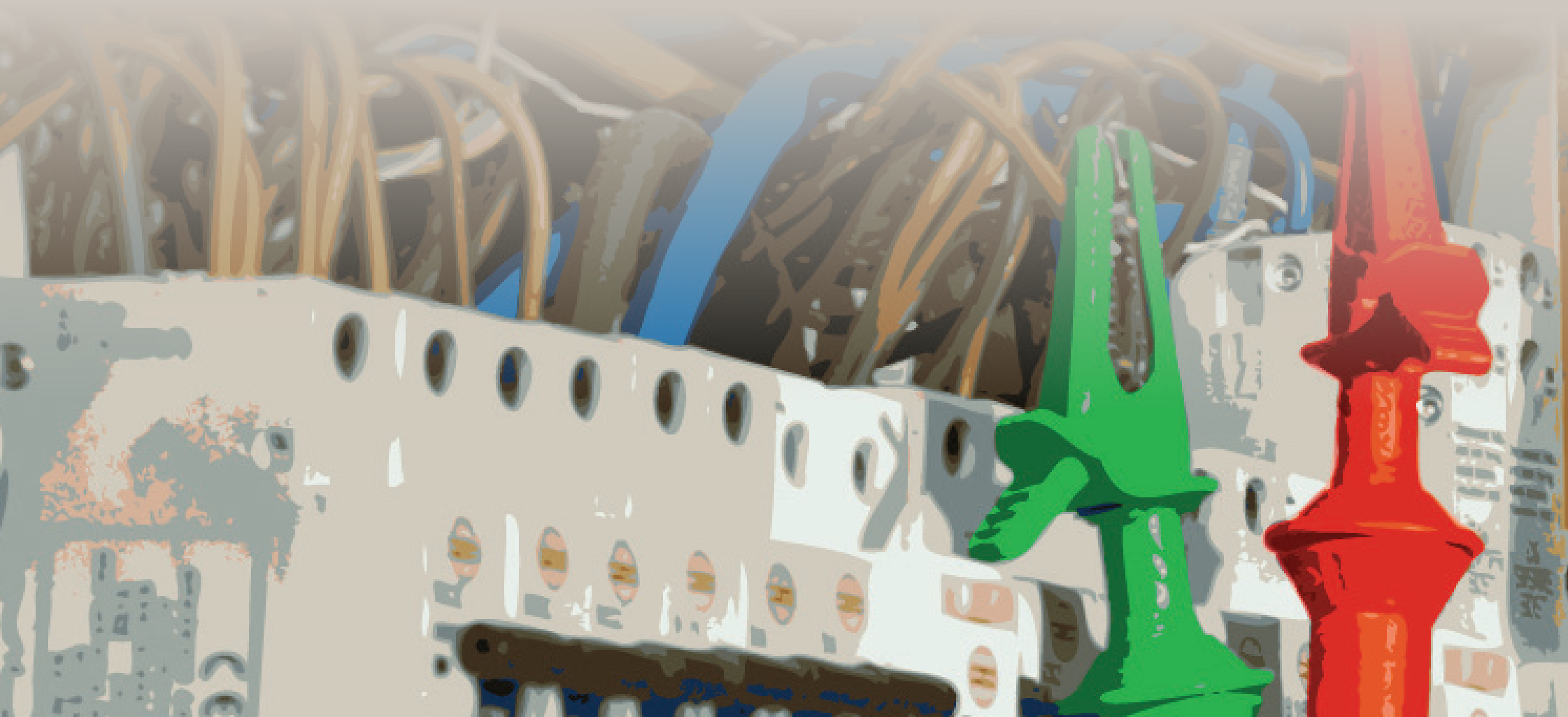
Electrical Duty Holder Guide



Supporting safer businesses

NAPIT have been at the forefront of electrical safety compliance for over 20 years. Travelers has developed an alliance with NAPIT to provide expert guidance and a bespoke electrical compliance audit service to help you meet your obligations under health and safety legislation.

This guide is designed to provide a comprehensive overview of the electrical safety requirements applicable to commercial and industrial employers, building owners, directors and managers who, as 'Electrical Duty Holders' with the greatest control over the workplace, have primary responsibility for its safe operation. It details the key duties specified under current legislation and the responsibilities these impose in practice. . To find out how NAPIT can help you to comply with these duties, visit: www.napitriskmanagement.co.uk

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Electricity can kill or cause life changing injuries in a matter of seconds.

What is the risk?

In Great Britain alone over 4.1 million working days were lost due to workplace injuries last year, accounting for over £2.8 billion pounds in lost revenue.[1]

The consequences of failing to take appropriate precautions to ensure the safety of electrical systems and their safe operation by staff are significant. Electricity is vital to the day to day operation of almost all businesses and a fault or loss of supply can have serious safety implications and financial costs:

- Electricity can kill or cause life changing injuries in a matter of seconds
- Electrical fires can cause irreparable property damage, serious injuries and fatalities

By having a comprehensive audit of your procedures and documentation completed by an experienced NAPIT Electrical Auditor, you have clearly demonstrated your commitment to reducing these risks.

But it is important to note that ongoing procedures and regular inspections are essential to the effective management of electrical safety in the workplace and for ensuring compliance with all applicable legislation.

[1] *http://www.hse.gov.uk/Statistics/cost.htm and http://www.hse.gov.uk/Statistics/causinj/index.htm*

What does the law require?

The legislative framework covering electrical safety at work is complex. This guide covers the general health and safety and electrical safety legislation affecting all businesses.

There may be additional requirements to follow that are unique to your place of work. It is therefore advisable to seek further advice in order to understand your obligations in full.

The key piece of legislation from which associated regulations derive their legislative force is the Health and Safety at Work Act 1974.

The Health and Safety at Work Act 1974 - the primary legislation covering occupational health and safety in Great Britain under which most breaches are prosecuted.

Additional legislation imposes legal requirements that set out how to comply in greater detail. These regulations include:

The Electricity at Work Regulations - which provide detail on the precautions to be taken against the risk of death or personal injury from electricity in use at a place of work.

The Management of Health and Safety at Work Regulations 1999 (Amended 2006)– which require employers to carry out risk assessments and make arrangements for the provision of, for example, appropriate information and training.[3]

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 – which impose duties to report certain serious workplace accidents and specified dangerous occurrences (e.g. near misses).

The Wiring Regulations (BS 7671) – a non-statutory British Standard which sets out recommended procedures designed to ensure the consistent quality of electrical installations and wiring. Compliance with BS 7671 is likely to achieve compliance with relevant aspects of the Electricity at Work Regulations 1989, as stated in these regulations.

[3] *www.legislation.gov.uk/uksi/1999/3242/contents/made*

Duty holders are responsible for ensuring the health, safety and welfare of their employees and members of the public

Where does responsibility lie?

Who is responsible?

Under the Health and Safety at Work Act 1974, it is made clear that all employers, as well as any individual with any measure of control over the business premises (e.g. managers, directors and building owners) are classed as Duty Holders, with responsibilities for ensuring the health, safety and welfare of the employees and of members of the public visiting the premises.

Employees also have responsibilities under the Act as Duty Holders. They are required to take reasonable care for the health and safety of themselves and of anyone who may be affected by their acts or omissions at work. They must also co-operate with their employer where necessary to enable them to meet their legal obligations.

Those involved in the design, construction, operation or maintenance of electrical systems in a place of work can also be held responsible, even if not directly employed by the business in question.

The duties apply to individuals in these groups where they relate to matters within their control.

As employers, building owners, directors and managers (hereafter referred to as a Primary Electrical Duty Holders), tend to have the greatest measure of responsibility over health and safety in the workplace, responsibility for compliance rests primarily with these groups.

What are they responsible for?

Duty Holders with overall responsibility for the business may appoint additional Duty Holders with specific knowledge of the systems in use to ensure the safety of everyone in the workplace.

Electrical Installation Condition Reports (EICRs) should be scheduled at intervals appropriate to the types of installations and equipment present in the workplace.

Maintain a general policy regarding the health and safety at work for employees, bringing any/or future revisions to attention. This is a requirement under the Health and Safety at Work Act 1974.

Make a suitable and sufficient risk assessment of the workplace and, if you employ five or more people, record the significant findings and any group of employees especially at risk, in written form.

Keep this Electrical Duty Holder Report safe so that you have a record of documents and procedures to satisfy your health and safety responsibilities.

The Primary Electrical Duty Holder's responsibilities can therefore be summarised to the need to ensure

- safe procedures (please see page 8)
- safe places (please see page 11)
- and safe people (please see page 14)

When are they responsible?

Some regulations impose absolute requirements and are clearly worded to that effect.

Others use the phrase 'as far as is reasonably practicable'. Ultimately, should an accident occur, the interpretation of this clause will be in the hands of the courts. So the guidance provided by the Health and Safety Executive should always be followed. It states that:

"Where the risk is very often that of death, e.g. from electrocution, and where the nature of the precautions which can be taken are so often very simple and cheap, e.g. insulation, the level of duty to prevent that danger approaches that of an absolute duty." [4]

[4]*Guidance on Regulations The Electricity at Work Regulations 1989., HSR25 (Third edition) Published 2015*

Designed to ensure the health and safety of all staff and visitors to your premises.

Managing risk

All places of work are different. It may be necessary for work to take place in confined spaces, under wet conditions, around moving vehicles and in other hazardous areas, which can compound the risk of an accident occurring. Different places of work will therefore require different inspection and maintenance regimes and these should always be carried out by a competent maintenance team or contractor.

Appointing a Duty Holder (Electrical) to manage the procedures and processes to achieve electrical safety is an essential part of creating a safe system of work.

Additional risk factors should all be considered by the appointed Duty Holder and a risk assessment carried out prior to having your Electrical Compliance Inspection carried out, as this information will be requested.

Safe procedures

Safe procedure is all about creating a laid out and considered way of working, designed to ensure the health and safety of all staff and visitors to your premises.

Risk assessment

Risk assessments are written statements used to identify and limit risks, and demonstrate that you have done so. They are required by law under the Management of Health and Safety at Work Regulations 1999 and should be carried out and formally recorded before any work begins that may present a risk of injury or ill health. They must include careful evaluation of:

- anything that may harm people in your workplace
- who may be harmed and how
- the risks and appropriate controls necessary to reduce them to an acceptable level

It should show that:

- a proper check was made
- all people who might be affected were considered
- all significant risks were assessed
- the precautions taken are reasonable
- the remaining risk is low

This should be reviewed whenever there is a notable change to consider. Anyone competent to do so can undertake a risk assessmen and businesses normally appoint a consultant or manager to do so.

Method statement

Method statements detail the sequence in which work will be carried out. They are not required by law but are often considered a necessary precaution in high risk environments.

A method statement should include all the risks identified in the risk assessment and detail how they should be controlled. It should also outline how work should be done to manage risk effectively and increase efficiency.

Permits to work

A permit-to-work is a documented procedure that authorises certain people to carry out specific work within a specified time frame. It is required prior to high risk work where, for example, for safely isolating electrical systems they need to be locked off and safe isolation demonstrated to ensure the safety of the person carrying out such work. It describes what work will be done and how it will be done.

The permit requires declarations from the people authorising the work and carrying out the work. Where necessary it requires a declaration from those involved in shift handover procedures or extensions to the work. Finally, before equipment or machinery is put back into service, it will require a declaration from the person that issues the permit to confirm that the electrical systems are safe and ready to use again.

Determine what can be done to remove any identified hazards

Where do I begin?

The Duty Holder (Electrical) should ask themselves:

1. Do I know the risks arising from our activities?
2. Do I know how to eliminate, control or reduce them?
3. Do I communicate the above information through my company or organisation?
4. Do I know staff are complying with those measures? How are they complying?

If you are unsure of the answers to any of these questions, you need to:

- Carry out a risk assessment of your working practices, environment and equipment
- Determine what can be done to remove any identified hazards and then address them
- Should unavoidable hazards remain, develop a safe system of work
- Formalise any new systems of work into safe working procedures via your method statement
- Include in your procedures, where necessary, the use of 'Permits to work' coupled with physical lock-off systems where appropriate
- Inform and train your staff along with any external contractors you employ
- Provide regular informal group discussions on safe working practices and procedures
- Observe all parts of the procedure, modify if necessary and continue to monitor

Safe places

Safe installations

The Electricity at Work Regulations legally require all electrical systems to be maintained so as to prevent danger. The Wiring Regulations (BS 7671) then provide additional non-statutory requirements on how the design, selection, erection and inspection and testing of electrical installations are to be carried out. Compliance with the Wiring Regulations is likely to achieve compliance with relevant aspects of the Electricity at Work Regulations 1989.

All electrical installations are subject to damage and deterioration over time so it is essential that they are inspected and tested at appropriate intervals to determine their condition. This could be done by a NAPIT registered electrician experienced in the scope of work (e.g. commercial or industrial) appropriate to your business. The electrician should carry out thorough inspection and testing of the full electrical system and provide an Electrical Installation Condition Report (EICR).

The report will recommend any remedial actions necessary to ensure the installation is safe to remain in service until the next scheduled inspection and test. When this inspection should take place will be determined by the electrician that provides the EICR but should not exceed the maximum* inspection frequencies detailed in IET Guidance Note 3: Inspection and Testing, p73, Table 3.2. This guide to the IET Wiring Regulations (BS 7671) is available for purchase online.

It is strongly advised that you follow the guidance notes to these regulations, which state that: "Records of maintenance, including test results will enable the condition of the equipment and the effectiveness of maintenance policies to be monitored."

What records should I keep?

Your Electrical Duty Holder Report contains a thorough audit of the documentation required to demonstrate effective electrical safety management.

You should ensure that any recommendations made to improve your records are addressed promptly in order to meet your duty to keep adequate and relevant information on electrical systems in your place of work. This is required in order to aid the safe use, inspection, testing and maintenance of installations, as required under the Health and Safety at Work Act 1974.

In order to identify deterioration and damage over time and ensure an appropriate schedule of maintenance checks are carried out, it is also important that you keep records of all checks, inspections and tests, including test results throughout the working life of an electrical installation.

You should request and keep diagrams or similar means for identifying each electrical circuit on the premises from your electrician so that the appropriate locations for protection, isolation and switching can be easily identified should maintenance, repair or replacement be required in future, as specified in the Electricity at Work Regulations 1989.

*Recommended

Action should be taken without delay to rectify the observed deficiencies

What certificates and reports are required?

Electrical Installation Certificate – Designed for use when inspecting and testing a new installation or an alteration or addition to an existing installation where new circuits have been introduced. The EIC will indicate the responsibility for design, construction and inspection and testing.

Minor Works Certification – Designed for use when an addition to an electrical installation does not extend to the installation of a new circuit. It is used where the addition of a socket-outlet or light to an existing circuit, or the 'like for like' exchange of an item of electrical equipment such as a light fitting, has taken place.

Electrical Installation Condition Report (EICR) – Designed for use when undertaking routine periodic inspection and testing in order to produce a report on the condition of an existing installation.
The EICR will normally consist of a number of pages covering client information and details of the installation. It will also detail the reason for and the extent and limitations of the inspecting and testing, a summary of the condition of the installation (e.g. satisfactory or unsatisfactory) and the observations, recommendations and inspection and testing schedules.

What should I do about any reported defects?

Defects and observations recorded in an EICR will usually follow the definition suggested in BS 7671, namely codes C1, C2, C3 and FI, as defined below. You should take any specified action according to the severity of the code assigned by the electrician conducting the report.

These codes are:

C1 – Danger present, risk of injury. Immediate remedial action required
The persons using the installation are at immediate risk. Action should be taken without delay to rectify the observed deficiency, or other appropriate action should be taken such as switching off and safely isolating the affected part of the installation. If available, a dangerous condition notification form should be issued to communicate the dangerous conditions observed.

C2 – Potentially dangerous. Urgent remedial action required
Whilst not considered to be immediately dangerous at the time of the inspection, a C2 classification would indicate a danger would be present should a 'fault' or other unforeseeable event occur in the installation or its connected equipment. Remedial action should be taken as a matter of urgency.

C3 – Improvement recommended
Whilst not considered to be a source of immediate or potential danger at the time of the inspection, a C3 classification would indicate that an improvement would substantially enhance the safety of the electrical installation.

FI – Further investigation required without delay
If an observation is made which could reasonably be expected to reveal danger or potential danger and the observation cannot be classified with an observation code, Further Investigation should be called for and the outcome of the inspection reported as 'unsatisfactory'.

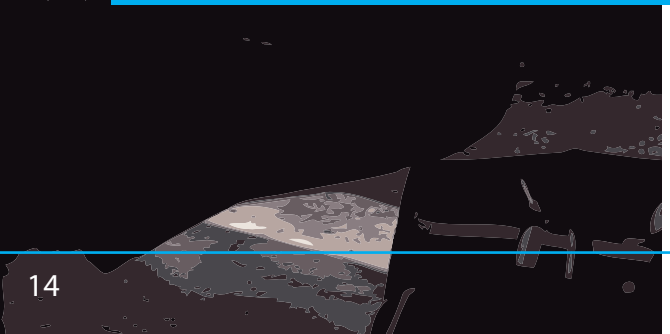
Safe equipment

You must maintain electrical equipment to ensure it does not cause danger, but the Electricity at Work Regulations 1989 do not say how you must do this or how often. You should decide the level of maintenance needed according to how the equipment is used, the risk of an item becoming faulty, and how the equipment is constructed.

Everything from electrical office equipment to industrial tools should be considered to ensure the health and safety for workers and site visitors but the type and regularity of checks will vary based on the level of risk posed by use, deterioration and damage over time . Information on recommended inspection frequencies can be found in the IET Code of Practice for In-service Inspection and Testing of Electrical Equipment, p52, Table 7.1. This guide is available for purchase online.

Checks will vary based on the level of risk posed by deterioration and damage

Check that all contractors and maintenance staff employed are competent to carry out the scope of work required.



Safe people

Employees

The Duty Holder is responsible for ensuring employees receive sufficient information, instruction, training and supervision to ensure their health and safety at work and that of those around them.

This is required under the Health and Safety at Work Act 1974 and it is for you to determine what training and supervision may be necessary based on the risk present in a given environment. However, if there are specific standards to work to for your industry or sector, these should always be observed.

Contractors

Regulation 16 of the Electricity at Work Regulations, states that "No person shall be engaged in any work activity where technical knowledge or experience is necessary to prevent danger..., unless they possess such knowledge or experience, or are under a degree of supervision as may be appropriate having regard to the nature of the work."

This regulation refers to those working on electrical systems and the safest way to ensure compliance with it is to check that all contractors and maintenance staff employed are competent to carry out the scope of work required.

Competence includes knowledge of electricity, experience of electrical work, understanding the systems being worked on, understanding all the hazards and precautions necessary in a particular environment and having the ability to recognise and when it is and isn't safe to work.

To ensure the competence of those you employ, it is advisable that you use a NAPIT Registered Installer for commercial and industrial electrical work.

Recommended inspection frequency

How frequently should electrical installations be inspected?

It is the responsibility of the duty holder to maintain installations in a safe condition and introduce an inspection regime that is proportionate to the level of risk common to specific environments. The frequency of these inspections will be different in commercial and industrial locations for example and can vary based on special locations and installations.

The IET Wiring Regulations (BS 7671) set out industry best practice but the maximum inspection frequencies applicable to the sectors, locations and installations you may be responsible for are detailed in Guidance Note 3: Inspection and Testing, p73, Table 3.2. This guide to the IET Wiring Regulations (BS 7671) is available for purchase online.

If you choose to have a bespoke Electrical Duty Holder Report completed by a NAPIT approved electrical auditor, this will include professional recommendations on future inspection frequencies specifically tailored to your business. To arrange an audit, simply visit: www.napitriskmanagement

How frequently should electrical equipment be inspected?

The recommended frequencies for the inspection and testing of electrical equipment depend on a number of considerations. They vary based on whether the installation is stationary, IT based, moveable, portable, hand held or fixed. They can vary based on the class of the installation or appliance. Class 1 equipment for example requires earthing, while Class 2 equipment does not. This in turn results in differing levels of risk and differing recommended inspection frequencies. And they also vary based on where the sector the premises you're responsible for happens to be, i.e. commercial, industrial, hotels etc.

It is therefore vital that an appropriate inspections regime is implemented. Information on recommended inspection frequencies can be found in the IET Code of Practice for In-service Inspection and Testing of Electrical Equipment, p52, Table 7.1. This guide is available for purchase online.

If you choose to have a bespoke Electrical Duty Holder Report completed by a NAPIT approved electrical auditor, this will include professional recommendations on future inspection frequencies specifically tailored to your business. To arrange an audit, simply visit: www.napitriskmanagement.co.uk

Comprehensive electrical compliance audit

Next steps - the compliance audit

The Electricity at Work Regulations 1989 requires your electrical systems to be maintained at all times to prevent danger. Your inspector will expect this to be the case, in line with the advice provided in this guidance document.

To ensure you have covered your duties under applicable health and safety legislation, NAPIT are able to provide a comprehensive electrical compliance audit and present you with a bespoke Electrical Duty Holder Report tailored to your business.

A Self-Assessment checklist is available to all Electrical Duty Holders prior to requesting a full Electrical Compliance Audit by completing the contact form at www.napitriskmanagement.co.uk

To find out more about any of the issues considered in this guide or to arrange an audit, visit www.napitriskmanagement.co.uk or email info@napitriskmanagement.co.uk

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