

Changes to the IET's Code of Practice for In-service Inspection and Testing of Electrical Equipment (ISITEE)

Major changes to the IETs Code of Practice are planned, to incorporate new industry requirements for in-service inspection and testing of electrical equipment.

By Richard Townsend

The Code of Practice (CoP) for In-service Inspection and Testing of Electrical Equipment (ISITEE): 3rd edition, produced by the IET, is currently undergoing a revision process to better reflect the industry and consumer requirements for the safety of electrical equipment and appliances. The main drivers for these changes have been the increased requirement for guidance from more diverse business types and a more focused approach to risk based assessing for frequency of inspections and tests.

The former will be addressed with a much broader and less restrictive scope, which currently alienates or fails to include the many new and diverse businesses that are becoming more prevalent in

today's society, particularly those enterprises which deal with previously-owned goods, through either outlet shops or online selling.

The change in scope will also address the issue of hired equipment, which may form part of a long-term contract, which would not normally be included in the current scope or was unclear as to what was required.

Hired equipment covers a wide range of business types and equipment, from building site transformers to vending machines and concert visual and audio rigs. The latter has a particular requirement for inclusion due to the rigorous nature of its use. The need for clearer guidance of the responsibilities of those

persons hiring equipment, of any type, was much needed and the new changes will outline the requirements for those hiring equipment of all types, for any reason.

One important development, which will have an impact on UK businesses in general, has been the publication of the Lofstedt report, which makes reference to industry 'over-compliance', not only within the electrical industry and its associated 'Portable Appliance Testing (PAT)' sector, but the whole of industry in general, covering a broad range of legislative over-compliance. From an electrical industry perspective, the Lofstedt report implied that businesses were being pressured to over comply by carrying out annual inspections and tests, when

they may not have been necessary.

The pressure to over-comply may have come from many sources, overzealous inspection companies, a misunderstanding of the requirements or the wrongly perceived industry norm that annual testing is a requirement.

The IET's CoP for In-Service Inspection and Testing of Electrical Equipment (ISITEE), has always emphasised that the frequency of inspections and testing should be reviewed on a regular basis in order to effectively assess the risk of use of any appliance, or piece of equipment, and in so doing extend or reduce any subsequent frequencies of inspection or testing, as may

be necessary.

Taking into consideration the Lofstedt report and the confusion associated with the frequency of inspection and testing, the CoP for ISITEE update will give clearer guidance and far more emphasis will be placed on the need for on-going risk assessments to more accurately set effective frequencies of inspection and testing, where necessary. In many cases the frequency of inspection and testing has the potential to be extended to respectively long periods without any detriment to the user or the equipment.

The new CoP ISITEE guidance on risk based assessments is being developed by an industry stakeholder peer group which includes the HSE and is seen as a positive step forward.

The HSE has also updated their documentation in order to give further guidance on in-service appliance testing in light of the outcomes of the Lofstedt report. These new documents, INDG231 and INDG236, the latter being a combination of the old INDG236 and INDG237, both of which are available as free downloads from the HSE website www.HSE.gov.uk.

The new CoP ISITEE represents a considerable improvement upon an already well respected, industry leading document. The many changes and alterations will enable both building managers and inspectors to understand their obligations and make a more informed decision on the level of inspections and testing required at an individual location. This will help to

reduce the costs associated with over compliance in the whole of the UK workplace.

Other expected changes to the CoP for ISITEE may include:

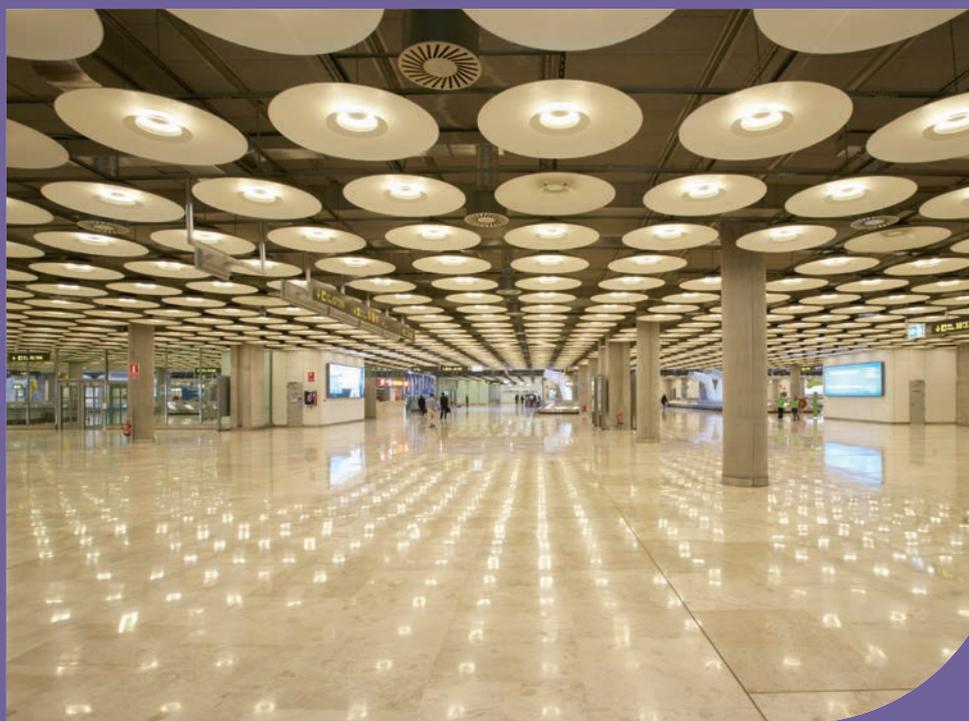
- Removal of non-associated tests, such as microwave leakage and manufacturers production tests
- Increased and additional definition clarity
- Additional equipment types
- Additional information on legislation and residence types
- Clearer guidance on types of residences and the requirements for landlords

The IET's 4th edition of the Code of Practice for In-Service Inspection and Testing of Electrical Equipment is expected to be published in November of this year with advance purchase orders being possible in mid-August from the IET's website www.theiet.org/electrical.



Code of Practice for In-service Inspection and Testing of Electrical Equipment

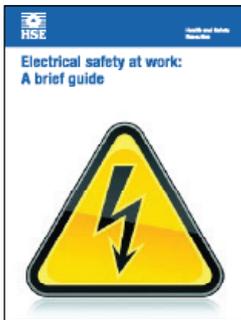
3rd Edition





Electrical safety and you

A brief guide



This is a web-friendly version of leaflet INDG231(rev1), published 04/12

Introduction

Electricity can kill or severely injure people and cause damage to property. Every year many accidents at work involving electric shock or burns are reported to the Health and Safety Executive (HSE). Most of the fatal incidents are caused by contact with overhead power lines.

Even non-fatal shocks can cause severe and permanent injury. For example, shocks from faulty equipment may lead to falls from ladders, scaffolds or other work platforms.

Those using or working with electricity may not be the only ones at risk – poor electrical installations and faulty electrical appliances can lead to fire, which may also cause death or injury to others. Most of these accidents can be avoided by careful planning and straightforward precautions.

This leaflet provides some basic measures to help you control the risks from your use of electricity at work. Further guidance for particular industries or subjects can be found on HSE's website (www.hse.gov.uk).

What are the hazards?

The main hazards are:

- contact with live parts causing shock and burns – normal mains voltage, 230 volts AC, can kill;
- faults which could cause fire; and
- fire or explosion where electricity could be the source of ignition in a potentially flammable or explosive atmosphere.

Assessing the risk

Your health and safety risk assessment should take into account the risks associated with electricity. It will help you decide what action you need to take to use and maintain your electrical installations and equipment and also how often maintenance is needed. See HSE's website for further guidance (www.hse.gov.uk/risk).

The risk of injury from electricity is strongly linked to where and how it is used. The risks are greatest in harsh conditions, for example:

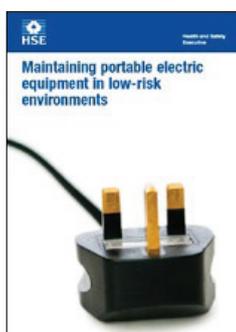
- in wet surroundings – unsuitable equipment can easily become live and can make its surroundings live;
- outdoors – equipment may not only become wet but may be at greater risk of damage; and
- in cramped spaces with a lot of earthed metalwork such as inside a tank – if an electrical fault developed it could be very difficult to avoid a shock.

The updated HSE publication
INDG231: Electrical safety and
you, which recognises the recent
changes made to INDG236.
[http://www.hse.gov.uk/pubns/
indg231.htm](http://www.hse.gov.uk/pubns/indg231.htm)



Health and Safety
Executive

Maintaining portable electric equipment in low-risk environments



This is a web-friendly version of leaflet INDG236(rev2), published 04/12

Introduction

This leaflet explains the simple and sensible precautions that need to be taken to prevent danger from portable or movable electrical equipment in low-risk environments, such as offices, shops, some parts of hotels and residential care homes.

It also provides examples of this sort of equipment to help you decide what you need to do to maintain portable appliances in your workplace.

What does the law say?

You must maintain electrical equipment if it can cause danger, but the law* does not say how you must do this or how often. You should decide the level of maintenance needed according to the risk of an item becoming faulty, and how the equipment is constructed. You should consider:

- the increased risk if the equipment isn't used correctly, isn't suitable for the job, or is used in a harsh environment; and
- if the item is not double insulated, for example some kettles are earthed but some pieces of hand-held equipment, such as hairdryers, are usually double insulated. See page 4 for more information on earthed equipment and double insulated equipment.

This includes any electrical equipment your employees use at work, whether it is their own or supplied by you. You have a joint responsibility to maintain any equipment used by your employees that is either leased (eg a photocopier) or provided by a contractor (but not equipment both provided and used by a contractor).

You will need to check periodically if any work needs doing. How you do this depends on the type of equipment.

Not every electrical item needs a portable appliance test (PAT)

In some cases, a simple user check and visual inspection is enough, eg checking for loose cables or signs of fire damage and, if possible, checking inside the plug for internal damage, bare wires and the correct fuse.

Other equipment, eg a floor cleaner or kettle, may need a portable appliance test, but not necessarily every year.

* *Electricity at Work Regulations 1989*

Extract from The HSE's new publication INDG236: Maintaining portable electrical equipment in low-risk environments.
<http://www.hse.gov.uk/pubns/indg236.htm>