Landlords' guide to **electrical safety**

ELECTRICAL SAFETY COUNCIL

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▲ Typical examples of potentially dangerous electrical installations

1. Introduction - Why you need this guide and how it can help you

The Electrical Safety Council (ESC) has produced this guide to help landlords understand their responsibilities for electrical safety in their rental properties – and to provide practical advice on what is required to ensure the safety of tenants.

Our aim is to help you protect your tenants and your property by providing you with essential information on electrical safety.

Great Britain has a relatively good record of electrical safety but the most recent figures available show that in 2010:

- 22 people[1] died as a result of electrocution and/or fatal electric burns suffered at home
- there were 20,284[2] accidental electrical fires in homes, resulting in 48 deaths and 3,324 injuries.

Most accidents involving electricity in the home arise through faults in, or misuse of, domestic appliances or the electrical installation. Another major cause is objects being placed too close to a heat source, such as an electric heater or lamp. In 2010, this resulted in 15[2] deaths and many serious burn injuries.

The three major hazards from electricity in the home are electric shock, fire and burns. These can occur through:

- the electrical installation and equipment deteriorating over time
- damage to switches, sockets and other equipment
- misuse of the installation and equipment
- poor or lack of maintenance of the installation and equipment
- vandalism.

[1] *Deaths are from w86/w87 ICD cause categories as created by the World Health Organisation, this data is derived from two tables - Deaths, by sex, age and cause, Scotland, 2010, published by General Register Office for Scotland and Mortality Data for 2010, England and Wales, published by the Office for National Statistics.*

[2] *Data supplied by the Department for Communities and Local Government, 15/02/2012.*

2. The law and what you need to know

Landlords have a legal duty to ensure that their rental property, and any electrical equipment provided, is safe before a tenancy begins and throughout its duration.

England and Wales

The ***Landlord and Tenant Act 1985*** is the main legislation for landlords in England and Wales. Key points can be found in:

Section 8. *Implied terms as to fitness for human habitation*

- The property should be fit for people to live in at the beginning of the tenancy (subsection (1)(a))
- The property should be kept in a fit state for people to live in during the tenancy (subsection (1)(b)).

Section 11. *Repairing obligations in short leases*

This places a duty on landlords to keep in repair and proper working order the installations in the property for

- the supply of water, gas and electricity, and for sanitation (subsection (1)(b))
- space heating and heating water (subsection (1)(c)).

Two other Acts - the ***Occupiers' Liability Act 1957*** and ***Occupiers' Liability Act 1984*** - give landlords a duty of care for anyone visiting their property. In short, a landlord could be prosecuted if someone is injured on their land or premises – regardless of whether the visitor is there lawfully (the 1957 Act) or trespassing (the 1984 Act.)

In January 2005, the ***Building Regulations for England and Wales*** were amended to include ***Part P***, which covers electrical safety in dwellings. This means that all electrical installation work undertaken in a home in England or Wales must, by law, comply with Part P of the Building Regulations. This requires *'reasonable provision… in the design and installation of electrical installations …to protect persons operating, maintaining or altering the installations from fire or injury'.*

Approved Document P

Except for some types of minor work, if you intend to carry out electrical installation work in domestic premises, you must either notify a building control body (usually your local authority building control department) before the work starts, or have it carried out by an electrician who is registered with one of the Government-authorised Part P competent person scheme operators. More information can be found in Approved Document P, which can be downloaded free from **www.planningportal.gov.uk/uploads/br/AD_P_wm.pdf**

▲ Fire Safety Risk Assessment

In October 2006, the ***Regulatory Reform (Fire Safety) Order 2005 (England and Wales)*** became law. It replaces most previous fire safety legislation and applies to all non-domestic premises, including common parts of blocks of flats, and houses in multiple occupation (HMOs).

Guidance on carrying out a fire safety risk assessment for sleeping accommodation can be downloaded free from **www.communities.gov.uk/publications/fire/firesafetyrisk4**

Communal areas

A landlord is also responsible for the communal areas of a house, block of flats, or an estate that residents use in common with other tenants, such as:

• entrance halls and foyers • lifts • stairwells • corridors • landings • kitchens and bathrooms • laundries • gymnasiums, swimming pools and other leisure facilities • parking and refuse areas • pathways • gardens

The law for communal areas is different for Scotland, as explained below.

Scotland

The ***Housing (Scotland) Act 2006***, section 14 (Landlord's duty to repair and maintain) places similar duties on landlords to those required by the ***Landlord and Tenant Act 1985 for England and Wales***. Key points are:

Section 13. *The repairing standard*

A house or flat meets the repairing standard if:

- the installations in the house for the supply of water, gas and electricity and for sanitation, space heating and heating water, are in a reasonable state of repair and in proper working order (subsection (1)(c))
- any fixtures, fittings and appliances provided by the landlord under the tenancy are in a reasonable state of repair and in proper working order (subsection (1)(d)).

Section 14. *Landlord's duty to repair and maintain*

The landlord must ensure that the house or flat meets the repairing standard (of section 13)

- at the start of the tenancy (subsection (1)(a), and
- at all times during the tenancy (subsection (1)(b).

The ***Building (Scotland) Regulations 2004*** contains a number of 'expanded functional standards' that buildings have to meet. That is, the standards describe the functions a building should perform. The most relevant for electrical safety is mandatory standard 4.5 which states that:

'Every building must be designed and constructed in such a way that the electrical installation does not:

a) threaten the health and safety of the people in, and around, the building

b) become a source of fire'

For certain types of electrical installation work, you may need to obtain a building warrant – the legal authority to start the work. More information can be found on the Scottish Government website **www.scotland.gov.uk/Topics/Built-Environment/Building/Building-standards/homeinfo/homebw**

Research has shown that Scotland has a higher number of deaths, injuries and accidents caused by fire, compared with the rest of the UK[3] With this in mind, the Scottish Government introduced new legislation in October 2006, known as the ***Fire (Scotland) Act 2005***. It replaces most of Scotland's previous fire safety legislation and specifies who has responsibility for fire safety in non-domestic premises.

Note: Communal areas (such as stairwells, corridors and plant or boiler rooms) in tenements, flats and houses in multiple occupation (HMOs) are not classed as private dwellings under the ***Civic Government (Scotland) Act***, so are subject to the ***Fire (Scotland) Act 2005***.

Section 53 and 54 of the ***Fire (Scotland) Act 2005*** require persons in control of communal areas to carry out fire risk assessments. The ***Fire (Safety) Scotland Regulations 2006*** provide instructions on how to do this. You should also remember that it is a legal requirement to review fire risk assessments regularly.

Landlords who let private dwellings also have a responsibility to carry out fire risk assessments. Guidance for this can be found on the Scottish Government website **www.dontgivefireahome.com**

Details of fire safety risk assessments for sleeping accommodation is available on the Scottish Government website **www.firelawscotland.org**

[3] *Chief Fire Officer's report in Scotland Together (November 2008; published 2009)*

3. Electrical installations

An electrical installation comprises all the fixed electrical equipment that is supplied through the electricity meter. It includes the cables that are usually hidden in the walls and ceilings, accessories (such as sockets, switches and light fittings), and the consumer unit (fusebox) that contains all the fuses, circuit-breakers and, preferably residual current devices (RCDs)[4].

There are many factors that contribute to a 'good' electrical installation such as ensuring:

- there are enough sockets for electrical appliances, to minimise the use of multi-way socket adapters and trailing leads
- covers are in place to prevent fingers coming into contact with live parts (broken or damaged switches and sockets should be replaced without delay)
- 30 mA residual current device (RCD) protection is installed to provide additional protection against electric shock (see also Section 7 of this guide)
- satisfactory earthing arrangements are in place to ensure that a fuse or circuit-breaker can quickly clear an electrical fault before it causes an electric shock or fire
- satisfactory protective bonding arrangements are in place where required (so any electric shock risk is minimised until a fault is cleared)
- sufficient circuits are provided to avoid danger and minimise inconvenience in the event of a fault
- cables are correctly selected and installed in relation to the fuse or circuit-breaker protecting the circuit.

Over time, and with the wear and tear of regular use, the installation will start to deteriorate. Connections can work loose (a potential fire hazard), equipment can be damaged, and building and maintenance work can have an impact on the wiring.

One simple thing you can do to see if your electrical installation is safe, is to carry out a regular visual check. Things to look out for include:

- broken accessories (such as sockets and light switches)
- signs of scorching around sockets due to overloading
- overheating of electrical equipment (such as lampholders fitted with the wrong lamps) – usually detected by a strong, often fishlike, smell
- damaged cables to portable electrical appliances or trailing cables/flexes.

[4] *An RCD (residual current device) is a life-saving device which is designed to prevent you from getting a fatal electric shock if you touch something live, such as a bare wire. It provides a level of protection that ordinary fuses or circuit-breakers cannot provide.*

As well as regular visual safety checks, the ESC recommends regular periodic inspections. These should be carried out by a registered electrician. After a periodic inspection, you should always be given an *Electrical Installation Condition Report (EICR)* containing details of the inspection and testing undertaken, the outcomes of the inspection and testing with recommendations as to what remedial action (if any) is required, and a declaration of whether or not the installation is safe for continued use (see also Section 5 of this guide).

▲ **Use the Home 'Electrical Safety Check' app. Download details can be found at www.esc.org.uk**

4. Certification of electrical installation work

You should ensure that you receive and keep the paperwork for all completed electrical installation work and periodic inspection and testing. All certificates and reports should include schedules of inspections and test results.

The type of certification or report you receive depends on the extent and type of electrical installation work, or inspection and testing, you have had carried out.

Electrical certification for new installations, alterations or additions

Electrical Installation Certificates (EICs) and Minor Electrical Installation Works Certificates (MEIWCs) provide you, as the person responsible for the safety of an electrical installation, with a declaration that the new installation, or alteration or addition, is safe to use at the time it was put into service.

These certificates, if retained, also provide a basis for any further inspection and testing, as they can help save on costly exploratory work which might otherwise be needed in future. Additionally, in the event of a claim that injury or fire was caused by an electrical installation, certificates are documentary evidence which help show that the installation had been installed to a satisfactory standard of safety.

The EIC will indicate whether the electrical work that has been carried out is 'new', an 'addition' or an 'alteration'. The term 'new' applies where the whole installation has been installed as new, if a complete rewire has been carried out, or where a consumer unit (fusebox) has been replaced.

The term 'addition' applies if an existing installation has been modified by adding one or more new circuits.

The term 'alteration' applies where one or more existing circuits have been modified or extended (for example to add a socket), or items such as a consumer unit (fusebox) and switching equipment have been replaced.

An EIC must be issued for *all* new electrical installations. It may also be required for an alteration or addition to the installation - depending upon whether or not a new circuit has been installed. Where an alteration or addition is carried out but does not include a new circuit, a MEIWC or an EIC may be used. A Domestic Electrical Installation Certificate is a form of EIC designed specifically for domestic electrical installations.

We strongly recommend that you use a registered electrician to carry out any electrical installation work. Information on how to find a registered electrician can be found on the ESC's website at:
www.esc.org.uk/registeredelectricians

5. Periodic inspection, testing and condition reporting

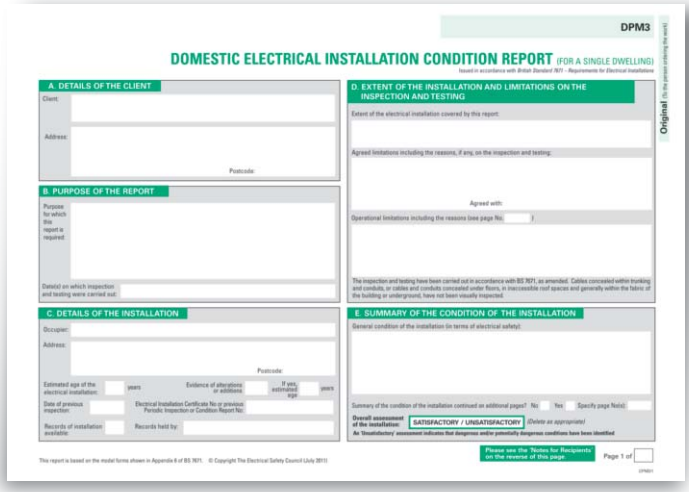
Every electrical installation deteriorates with use and age. You must ensure that your tenant(s) - or anyone entering or using your property - are not put at risk, by ensuring that the electrical installation remains in a safe and serviceable condition.

A periodic inspection checks the condition of an existing electrical installation against *BS 7671*, the UK Standard for the safety of electrical installations.

A periodic inspection should:

- discover if electrical circuits or equipment are overloaded
- identify potential electrical shock risks and fire hazards
- find any defective electrical work
- highlight any lack of earthing or bonding. A leaflet explaining the importance of earthing and bonding can be downloaded from **www.esc.org.uk/landlords**

Tests are also carried out on the installation to check that it is safe.



DPM3

DOMESTIC ELECTRICAL INSTALLATION CONDITION REPORT (FOR A SINGLE DWELLING)

Issued in accordance with British Standard 7671 - Requirements for Electrical Installations

Original (To be passed to person ordering the work)

A. DETAILS OF THE CLIENT

Client:

Address:

Postcode:

B. PURPOSE OF THE REPORT

Purpose for which this report is required:

Date(s) on which inspection and testing were carried out:

C. DETAILS OF THE INSTALLATION

Occupier:

Address:

Postcode:

Estimated age of the electrical installation: years

Evidence of alterations or additions: If yes, estimated age: years

Date of previous inspection:

Electrical Installation Certificate No or previous Periodic Inspection or Condition Report No:

Records of installation available:

Records held by:

D. EXTENT OF THE INSTALLATION AND LIMITATIONS ON THE INSPECTION AND TESTING

Extent of the electrical installation covered by this report:

Agreed limitations including the reasons, if any, on the inspection and testing:

Agreed with:

Operational limitations including the reasons (see page No:)

The inspection and testing have been carried out in accordance with BS 7671, as amended. Cables concealed within trunking and conduits, or cables and conduits concealed under floors, in inaccessible roof spaces and generally within the fabric of the building or underground, have not been visually inspected.

E. SUMMARY OF THE CONDITION OF THE INSTALLATION

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

Summary of the condition of the installation continued on additional pages? No Yes Specify page No(s):

Overall assessment of the installation: SATISFACTORY / UNSATISFACTORY (Delete as appropriate)

An 'Unsatisfactory' assessment indicates that dangerous and/or potentially dangerous conditions have been identified

Please see the 'Notes for Recipients' on the reverse of this page

This report is based on the model forms shown in Appendix 6 of BS 7671. © Copyright The Electrical Safety Council (July 2011)

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▲ Typical example of a Domestic Electrical Installation Condition Report

A schedule of circuit details and test results should always be provided as part of the Electrical Installation Condition Report. A copy of this schedule should be kept next to the consumer unit (fusebox) for information purposes.

Frequency of periodic inspections

How frequently an electrical installation needs to be inspected and tested during its life depends on factors such as the type of installation, and how it is used and maintained.

For rented accommodation, the maximum period recommended between the initial inspection (when the installation was first put into service) and the first periodic inspection and test is five years.

Periods between subsequent inspections will depend on the condition of the installation at the time of the preceding inspection, but it is recommended that periodic inspection and testing is carried out at least every five years or at the end of a tenancy, whichever comes first.

Where a change of tenancy occurs after a short period (for example less than six months), a full periodic inspection and test may not always be needed. However, in such cases, the landlord or their representative should always carry out a visual check to confirm that the property is safe to re-let.

The visual check should include ensuring that there are no burnt, broken or missing switches or sockets, no accessible live parts, no signs of burning on electrical equipment, and carrying out a manual test of any installed RCDs.

Houses in Multiple Occupation (HMOs)

England and Wales

The ***Management of Houses in Multiple Occupation (England) Regulations 2006*** and the ***Management of Houses in Multiple Occupation (Wales) Regulations 2006*** require that every electrical installation in an HMO is inspected and tested at least every five years by a suitably qualified person, who should provide a certificate giving the results of the inspection. If your local housing authority asks in writing for this certificate (Electrical Installation Condition Report - previously Periodic Inspection Report), you must supply it within seven days of receiving the request.

Scotland

The Licensing of houses in multiple occupation: Statutory guidance for Scottish local authorities also requires such inspection and testing to take place at least every five years.

The ESC recommends that you use a registered electrician. More information on electrical installation condition reporting is available on the ESC website at

www.esc.org.uk/public/home-electrics/periodic-inspection-explained/#c587 and **www.esc.org.uk/videos**

6. Electrical appliances

Most deaths from electric shock and fires in UK homes are caused by misuse of, or faulty, plugs, leads and appliances but many of these fatalities can be avoided by taking simple steps.

The safety of electrical appliances relies, to some extent, on the condition of the home's fixed wiring - but misusing electrical appliances will increase the risk of electric shock and fire. For example, after using an iron, winding the flexible cable around it may create a twist or kink in the cable. Repeating this process over time can damage the cable and increase the risk of electric shock or fire. To keep risks to a minimum, you and/or your tenant must ensure that portable electrical equipment is safely used, stored and regularly checked.

Providing electrical appliances

If you provide appliances (such as a kettle, iron or washing machine) for your tenant(s) you should check that the item carries, at least, a CE Mark - the manufacturer's claim that it meets the minimum requirements of EU legislation. The ESC recommends the purchasing of appliances that carry additional safety marks, such as the British Standard Kitemark or the 'BEAB Approved' mark, as these can provide greater assurance of electrical safety.

You need to make sure that any appliance you supply is suitable for its location and its intended use. To help ensure your tenants use appliances correctly, you should make copies of the manufacturers' instructions available for them to refer to.

Checking electrical appliances

To ensure electrical appliances remain safe to use, regular basic safety checks should be carried out.

For example, you and/or your tenant should check that:

1) there are no cuts or abrasions in the cable covering (sheath)

2) the outer covering of the cable is gripped by the cord grip in the plug top, so that no coloured cable cores are visible from outside of the plug

3) the plug has no cracked casing or bent pins

4) there are no signs of overheating or burning, particularly at the plug and socket

5) there are no loose parts or screws

6) no part of the appliance is damaged or missing

Most dangerous defects in electrical appliances can be identified by carrying out such simple checks. For more information on testing electrical appliances, go to **www.hse.gov.uk/electricity/faq-portable-appliance-testing.htm**

Using electrical appliances outdoors

Any socket supplying electrical equipment used outdoors should be protected by an RCD.

The ESC recommends that all sockets supplying electrical equipment for outdoor use are protected by a fixed RCD (where the RCD is fitted in the consumer unit (fusebox) or incorporated into a socket-outlet).

Fixed RCDs should be tested at least every three months by pressing the test button marked 'T' or 'Test' - see the instructions that should be on, or next to, the consumer unit. Or go to **www.esc.org.uk/public/home-electrics** to see our video.

If there is no RCD in the consumer unit, we strongly recommend that a portable plug-in RCD is provided. Equipment should be plugged into the portable RCD, which is then plugged into the socket. This type of RCD, which costs around £10, should be tested before each use by following the manufacturer's instructions.

7. Fire alarms

Electrical accidents are the primary cause of accidental domestic fires in the UK.

Loose connections in electrical equipment and parts of the electrical installation (such as sockets) can result in fire. Incorrectly selected fuses or circuit-breakers can also lead to overheated cables.

Many fires in the home start in the kitchen and are usually caused by cooking appliances. Other causes of fire include cigarettes and candles, and clothes being hung over heaters to dry.

To safeguard your tenants from the risk of fire, you will need to ensure that there is a suitable fire detection and fire alarm system, which should be regularly tested and maintained.

A properly installed and maintained fire alarm will alert occupants to a fire in its early stages, allowing them to get to a place of safety before escape routes become blocked by smoke or fire. The system should be designed to wake people who are sleeping and to alert them to fire in any hidden areas - such as boiler rooms, storerooms, cellars or lofts (if they contain equipment such as solar PV inverters or central heating boilers) - before the fire affects the escape route.

Selecting the fire alarm system

Consult a fire alarm specialist if you do not currently have a fire alarm system.

The type of fire alarm system you need to provide depends on the type of property you are letting, based on the level of risk. A small, single-family house will only require smoke alarms, while large HMOs need a more sophisticated system - including both smoke and heat detectors linked to a control panel and alarm sounders.

All residential premises where people are sleeping should have some form of automatic fire detection and warning system.

Testing fire alarm systems

All fire alarm systems need to be regularly tested to ensure they are working properly.

Basic, routine tests do not demand specialist knowledge and can normally be carried out by you or your tenant(s). Such tests are generally required weekly, where one or more detectors or call points are tested. For more complex systems, the results are required to be recorded in a log book.

Some tests and maintenance, however, (depending on the type of alarm system installed) may require specialist knowledge and/or equipment.

The person or company who installed your fire alarm system or other person who specialises in fire alarm systems will be able to advise you on what is required regarding routine testing and maintenance for your particular system.

If your premises have been empty for a considerable period of time you will need to check, before the premises are occupied, that there has not been a total power failure. Such a loss of supply could result in complete discharge of the back-up batteries for the fire alarm system leaving the premises unprotected.

8. Emergency lighting

In the event of fire, your tenants need to be able to find their way out of the property to a place of safety. This requires a planned escape route which is kept free from clutter and has sufficient lighting to allow for a fast (and safe) escape.

When a fire starts, people move rapidly in distress and panic. At night, when they have been awoken abruptly, they may also be disorientated. So it is important that staircases and escape routes are adequately lit.

Some buildings, such as those listed below, will also need emergency lighting covering the escape route. They include:

- large buildings with lengthy exit routes
- buildings with a complex layout
- buildings with no natural or borrowed lighting along the escape route
- buildings accommodating vulnerable people or those at particular risk, such as individuals who are confined to a wheelchair.

More information on risk assessment for emergency lighting can be found on the website of the Industry Committee for Emergency Lighting Ltd (ICEL) at:

www.icel.co.uk//media//technical/6%20-%20ICEL%201008%20Risk%20Assessment%20Guide%203-9-09.pdf

Further information on electrical safety can be found on the Electrical Safety Council website **www.esc.org.uk**

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Committed to clearer communication

The Electrical Safety Council (ESC) is a charity committed to reducing deaths and injuries caused by electricity.

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