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Electrical guidance

RISK ADVICE LINE

Having read this guidance should you have any additional questions on this topic or other risk related matters, as a valued Ecclesiastical customer you can contact us through our 'Risk Advice Line' on 0345 600 7531 (Monday to Friday 9am - 5pm, excluding bank holidays) and one of our in-house risk professionals will be able to assist. Alternatively you can email us at **risk.advice@ecclesiastical.com** and one of our experts will call you back within 24 hours.

For queries about your policy cover or claims please contact your insurance broker.

During the period 2015 – 2020 around 50% of the domestic fire loses reported to Ecclesiastical were electrical in origin.

Modern day electronics are everyday requirements in our homes. The most frequent causes of electrical fires were found to be defective electrical installations, faulty appliances, extension cables and the use of counterfeit chargers.

Electrical wiring

Faulty and ageing wiring is a major cause of electrical fires in dwellings. It is important to protect both yourself and the premises by having regular safety checks of your installation.

A domestic fixed electrical installation consists of the following parts:-

Electrical Consumer Unit (or fusebox), including the mains switch that allows you to disconnect the electricity supply to your installation.

Fuses can be found in older premises. If a fault occurs or the current flows above a safe level, this causes the fuse to melt which breaks the circuit, preventing further current flow.

Earth Leakage Circuit Breakers (ELCBs) or Residual Circuit Devices (RCDs) are safety devices (installed in the consumer unit) that switch off electricity automatically if there is a fault. RCDs are far more sensitive than traditional fuses and provide additional protection against electric shock. They continually monitor the electric current flowing along a circuit. If it detects electricity flowing along an unintended path, such as through a person who has touched a live part, it will switch the circuit off very quickly, thereby significantly reducing the risk of death or serious injury.

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In July 2008 a new edition of the UK standard for the safety of electrical installations, BS 7671: 2008, came into effect. This standard calls for virtually all circuits in new or rewired homes to be provided with additional protection by means of an RCD.

Older buildings

Older buildings may not have the wiring capacity to manage the increased demand from electrical appliances used in today's homes. It is important that wiring is checked by a qualified electrician, updated as appropriate or, if required, the entire system replaced.

Features that indicate that an installation will require attention include the following:

Electrical cables coated in black rubber, lead or fabric.

Fuse boxes with cast iron switches, a mixture of switches or on a wooden frame.

Round pin sockets

Light switches of outdated materials such as Bakelite or located in bathrooms.

Sockets mounted in skirting boards.

Causes of deterioration in electrical installations

Typical causes include the following:

Electrical circuits overloaded by connecting too many appliances.

Overheating

Damaged or inadequate insulation on cables or wiring

Environmental causes e.g. dampness or vermin

Accidental Damage

Wear and tear

Reducing the Risk

Don't store combustible items e.g. clothes, papers, cleaning materials close to your electrical equipment or near electrical consumer units.

Keep an eye out for defects such as cracked sockets or damaged insulation to cables and rectify immediately.

It is important that electrical systems are inspected by a competent person on a regular basis in accordance with British Standard BS 7671 'Requirements for Electrical Installations' Current Edition to minimise or eliminate possible danger arising.

Only us electrical contractors with membership of the National Inspection Council for Electrical Installation Contracting (NICEIC), The Electrical Contractors' Association (ECA), The Electricity Contractors' Association of Scotland (SELECT) or The National Association of Professional Inspectors and Testers (NAPIT).

Where electricians certified under the Part P scheme are used they should hold full scope membership under the scheme.

Ecclesiastical has partnered with British Engineering Services as a preferred supplier to supply this service. For further details go to: **www.ecclesiastical.com/risk-management/preferred-suppliers/**

Electrical Condition Inspection Report (EICR)

As Insurers we recommend that an Electrical Condition Inspection report (EICR) for private dwellings is obtained. This report is provided by an electrician following inspection of your property.

The EICR is an extensive check of the fixed wiring of the electrical installation. It is a safety check of the parts of the electrical system that are not visible e.g. wiring along with the fuse board, circuit breakers, RCD's, earthing of relevant pipework and metal etc. Defects identified are graded as follows:-

Code C1 – immediately dangerous which will be fixed at the time or made safe pending repair.

Code C2 – potentially dangerous.

Code C3 – recommendations to improve the system but do not impact safety.

Code F1 – indicates further investigation is required without delay.

The Institution of Electrical Engineers (IEE) and NICEIC recommend an EICR is carried out every 10 years for domestic premises (or when there is a change of occupancy)

For landlords, in accordance with the Electrical Safety Standards in the Private Rented Sector (England) Regulations 2020, which came into effect from 1 April 2020, a new EICR is required each time tenants change or every 5 years.

The EICR may need to be sent to us if requested to provide evidence that your electrical installation is safe.

You should keep a record of any electrical work, the work as well as inspection or test reports, and make sure a completion certificate is issued for any new work.

Faulty Electrical Appliances

The number of electrical appliances in all our homes is increasing, ranging from kitchen and laundry appliances through to entertainment and communication equipment. Some products may have inherent faults without the purchaser being aware. Counterfeit appliances can sometimes be obtained instead of the manufacturer's genuine version that we intended to buy.

Fires caused by faulty electrical appliances are often the result of overheating due to improper use or inadequate maintenance. For example:

Loose connections or taped joints

Damaged cables or plugs

Use of incorrectly rated fuses

Reducing the Risk

Before purchasing any appliance check whether the appliance model has been reported as faulty using a product checker such as Electrical Safety First.

Check for the 'CE mark' on any electrical product. This shows compliance with European safety standards.

Register newly purchased appliances with manufacturer. This helps manufacturers to notify purchasers directly about faults or recalls..

If you become aware the appliance has a known issue, contact the manufacturer to arrange a repair/replacement. In the meantime do not use them.

Avoid leaving appliances operating unattended (including overnight) and unplug them when not in use.

Avoid trailing cables, which can be damaged increasing the risk of fire as well as being a trip hazard.

Complete regular visual checks of equipment. This includes checking the outside of the appliance including the cable and plug to identify obvious signs of damage. Things to look out for include:

-Mechanical damage such as cracked casing

-Ensuring the cable is firmly gripped where it enters the plug with no internal wires showing

-No taped electrical connections are used.

-No scoing or charring

Items that appear unsafe should be repaired if safe to do so or disposed of and replaced.

Appliances that require regular maintenance should be serviced in accordance with the manufacturer instructions.

Extension Cables

As households seek to accommodate a greater number of electrical appliances, the use of multi-socket plugs and extension cables becomes more common and these can lead to overheating and fire when circuits are overloaded.

Reducing the Risk

Always complete a inspection prior to use to check for damage.

Extension cables should only be used as a temporary measure. It is common for them to be left for long periods of time.

Only ever use one extension lead per socket. If you find yourself always using extension leads arrange for additional permanent sockets to be installed by a suitably qualified electrician.

Check the power limit of adapters. Ensure the overall power demand from the appliances being run through it does not exceed the limit.

If using cable drum type extension leads always fully unwind the cable. There is a risk of overheating if used whilst part of the cabling is still coiled.

Counterfeit Chargers

Many believe that the higher cost of genuine chargers is down to the brand name. However, by purchasing a genuine charger you are buying a safer product. Counterfeit or cheaper chargers can be hard to resist but they may be made with low-quality components that do not meet the UK safety regulations.

Reducing the Risk

Always use the manufacturer's dedicated charger. Generic or imitation products may not provide power in the correct way and could allow too much current to enter the battery of a device causing it to overheat.

Follow the manufacturer's instructions on charging. Appliances and devices may overheat if left charging for too long.

Unplug chargers from their socket when not in use.

Visually inspect chargers prior to use.

Replace chargers if damaged.

Summary

1. It is important to ensure a domestic electrical installation is inspected for safety by an appropriately accredited electrician and any identified remedial work is completed at the earliest opportunity. It is generally recommended that an EICR is carried out every ten years for domestic premises.
2. Complete your own visual checks of wiring and appliances to identify signs of damage and overheating that need repair.
3. Only purchase branded electrical appliances.
4. Avoid leaving electrical appliances in operation if unattended.
5. Avoid the use of extension cables and adapters where possible and where they are used ensure you don't overload circuits and they are only used for short periods.
6. Only use genuine manufacturer parts when charging battery operated appliances.

Further information

Further helpful guidance on electrical safety can be found on **www.niceic.com/domestic-installer**
www.electricalsafetyfirst.org.uk/

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