



Risk Solutions

UK electrical wiring regulations

What do the 2018 changes mean for property owners and commercial landlords?

Technical bulletin

During 2017/18, there were 38,321 accidental property fires in England over a 12-month period according to UK Government statistics, with half of those fires caused by electrical faults/misuse⁽¹⁾. Property owners and commercial landlords are directly responsible, and legally accountable, for the prevention of electrical safety issues.

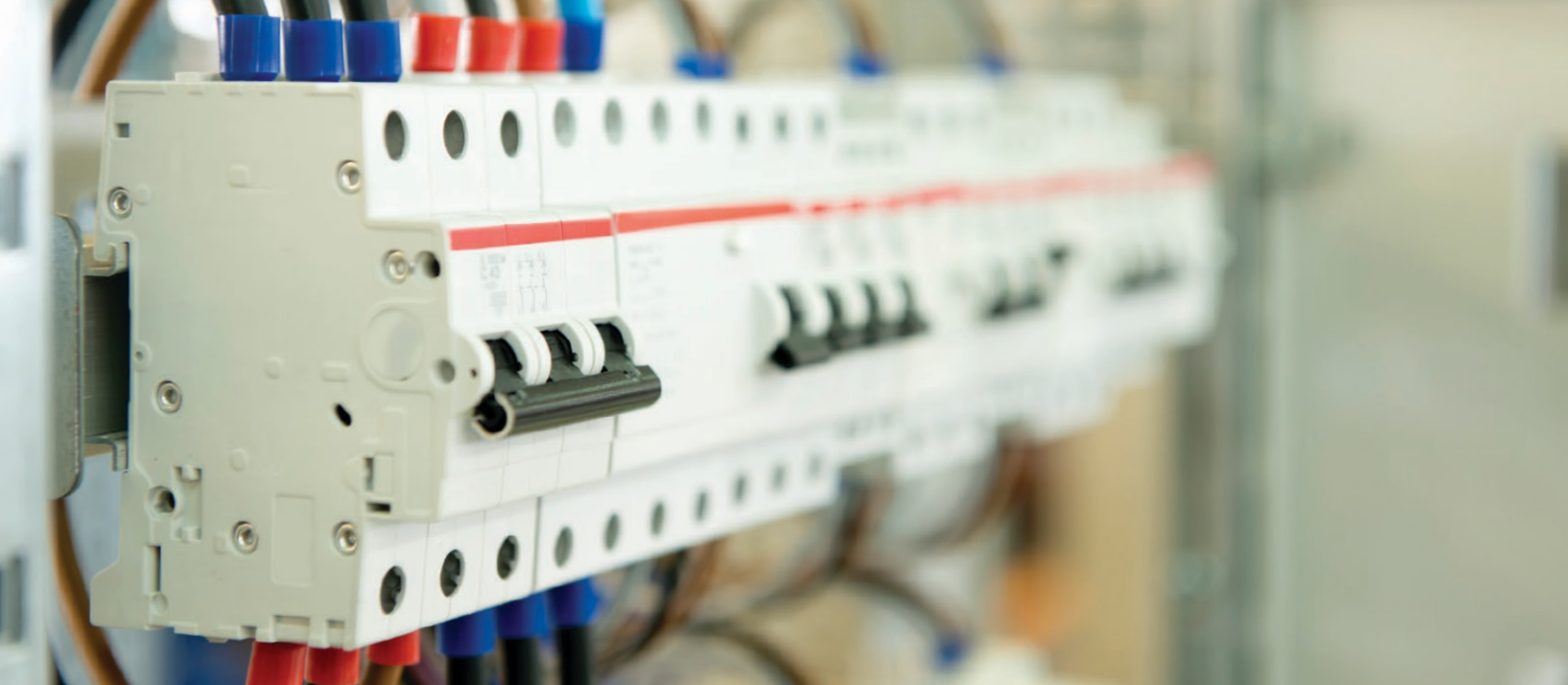
In July 2018, the 18th edition of the UK Wiring Regulations were released. Changes to the Regulations are often made to ensure electrical work and installations remain compliant, safe, and reflect the latest developments in electrical technology. The Institution of Engineering and Technology (IET) co-publishes the electrical Wiring Regulations alongside the British Standards Institute (BSI), and is the authority on electrical installation.

BS 7671 of the IET Wiring Regulations sets the standards which apply to the design, erection and verification of electrical installations, as well as additions and alterations to existing installations, in the UK and many other countries.

It is important that property owners and commercial landlords have an adequate level of understanding and awareness of the changes to these electrical regulations in order to remain compliant.

By following the guidance and regulations of BS 7671, property owners and commercial landlords can ensure that wiring systems meet the requirements of the Electricity at Work Regulations 1989.

Following the release of the 18th edition of BS 7671, there is a transition period in which property owners and commercial landlords can get up to speed before the new electrical Regulations come into effect. BS 7671 is not retrospective, so the changes are aimed at new installations designed after 1 January 2019 which must comply with the requirements.



Key regulatory changes relevant to property owners and commercial landlords

There are a number of key changes within the 18th edition which are relevant to owners/commercial landlords/facilities managers including the following:

- **Protection against overvoltage:** property owners/commercial landlords should consider installing surge protection devices on their installations to protect against transient overvoltages from lightning strikes or switching surges. The new regulations make clear that transient overvoltage protection must be provided where the overvoltage could result in serious injury or loss of life, interruption to public services or industrial and commercial activities, damage to cultural heritage, or a large number of individuals at the same location being affected.
- **RCD protection:** RCDs can no longer be excluded by risk assessment and are now required on lighting circuits (domestic), on all socket outlets with ratings up to and including 32A, and must be manually tested every six months.
- **Arc fault detection devices:** these are devices that automatically trip a circuit when they detect dangerous electric arcs. Installation of these devices are advised to mitigate the risk of fire.

- **Euroclass cable ratings:** all cables used in buildings must have a Euroclass rating. This is to prevent heat, smoke, flame spread, etc. Simply put, use the right class of cable type in the right location.
- **Wiring support:** all wiring systems must be supported (e.g. steel tray, trunking, etc.) to protect systems against premature collapse during fire. Previously, this only applied to escape routes.
- **Embedded electric heating (e.g. surface heating in car parks, floors, ceilings and drainpipes):** these systems must have protection against overheating and an earthed protective shield (e.g. metal mesh grid) in areas susceptible to damage.

Third party inspections can play an essential role in reducing fire risks to electrical systems.

The Health & Safety Executive (HSE) state they regard installations that conform to the standards set out in BS 7671:2018 as likely to achieve conformity with the relevant parts of the Electricity at Work Regulations 1989.

Part 6 of BS 7671 is fully dedicated to the routine inspection and testing of the installation by a 'Competent Person'.

Electrical inspection services

HSB is a leading specialist provider of inspection services in the UK and Ireland. Our inspection services are formally accredited by UKAS to the international standards for inspection bodies (ISO/IEC 17020).

Drawing on our vast experience and expertise, our technically expert network of Engineer Surveyors - who are 'Competent Persons' under BS 7671 - can help property owners, commercial landlords and facilities managers to achieve regulatory compliance and mitigate electrical wiring risks. We operate independently of installation and maintenance parties and can, therefore, provide impartial inspections, tests and reports on electrical installations.

For more information about our inspection services, visit our website: www.munichre.com/hsbeil

Footnote:

(1) The Home Office: Fire statistics data tables, as at 12 September 2018 (www.gov.uk/government/statistical-data-sets/fire-statistics-data-tables)