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New Electrical Standards Published

2 months ago

The Institution of Engineering and Technology (IET) together with the British Standards Institution (BSI) have today (15 April) released Amendment 4 (2026) to the standard Requirements for Electrical Installations (BS 7671:2018) (18th Edition of the IET Wiring Regulations), marking the latest update to the UK's national standard for electrical installation safety.

This new amendment reflects the fast-paced evolution of technologies across the sector and introduces substantial changes in areas including stationary secondary batteries, medical locations and Power over Ethernet (PoE).

This essential update to the IET Wiring Regulations forms the UK national standard for:

- all new low voltage electrical installations
- additions and alterations to existing installations
- periodic inspection and testing of existing installations

Amendment 4 is now available to be purchased and the previous version, BS 7671:2018+A2:2022+A3:2024, will be withdrawn six months from today.

New chapter: Stationary Secondary Batteries

One of the most significant developments is the introduction of a new chapter covering stationary secondary batteries, responding to the rapid growth of energy-storage technologies and their increasing deployment both with and without solar PV systems. The amendment sets out comprehensive

requirements relating to system design, power conversion equipment, bidirectional or hybrid inverters and the suitability of protective devices for two-way energy flow, an essential consideration as battery systems are increasingly used for vehicle-to-home and vehicle-to-grid applications. The chapter also places strong emphasis on safety-critical matters such as appropriate battery location, ventilation, and fire-risk mitigation.

New section: Power over Ethernet (PoE)

Section 716 introduces clear requirements for Power over Ethernet as Ethernet cabling is increasingly used to supply extra-low voltage DC to low-wattage equipment such as LED lighting and small appliances. The section focuses on the correct selection of power supplies and cables using SELV and PELV systems. While SELV and PELV typically allow up to 50 V AC or 120 V DC, Section 716, part of the Special Locations section, modifies these limits to 60 V ripple-free DC in dry locations and 15 V ripple-free DC elsewhere. To ensure safe operation, all electrical connections for PoE must comply with BS ISO/IEC 11801-1 and be capable of supporting a continuous operating current of 750 mA per contact.

Major revision: Medical Locations

Section 710 has been significantly revised to improve safety in healthcare environments where patients are more vulnerable to the effects of electricity. Medical locations are now clearly classified into Groups 0, 1 and 2, with Group 2 areas, such as operating theatres, requiring medical IT systems that use a transformer and insulation monitoring device to maintain supply during a first fault and alert staff before disconnection would occur on a second fault. To avoid dangerous loss of power, two independent supplies and a UPS must also be provided, positioned as close as possible to the equipment they support. These updates align the UK with IEC 60364-7-710:2021 and its CENELEC adoption, strengthening protection for patients and medical staff.

New section: Functional Earthing and Functional Equipotential Bonding for ICT Equipment and Systems

Section 716 is principally concerned with power supplies and cables using SELV (Safety Extra Low Voltage) and PELV (Protection Extra Low Voltage) as the method for protection against electric shock. Conventionally, SELV and PELV require a voltage limitation of 50 V AC and 120 V DC, however, Section 716 is in Part 7, Special Locations, of BS 7671 which supplements or modifies the general rules. In this case, Section 716 limits SELV and PELV to 60 V ripple-free DC in dry locations and 15 V ripple-free DC in all other locations.

The electrical connections for power over ethernet are to comply with BS ISO/IEC 11801-1 capable of supporting a continuous operating current of 750 mA per contact.

The IET and BSI encourage all electrical professionals to ensure they become familiar with the changes now that they have been published.

Mark Coles, Head of Technical Regulations at the IET, said: “The IET is the UK’s authority for electrical

installations, and Amendment 4 continues our commitment to ensuring the IET Wiring Regulations evolve in line with the technologies shaping modern and future electrical work. The inclusion of new requirements for stationary secondary batteries is a clear example of this progress, as advancing storage technologies increasingly support the integration of renewable energy in our daily lives. It is essential that the sector remains aligned with these developments to maintain safe and resilient electrical installations across the UK and that the industry is ready to work to this new amendment before BS 7671:2018+A2:2022+A3:2024 is withdrawn."

Sebastiaan van Dort, Director of Energy and Sustainability at BSI said: "BSI is proud to jointly publish this vital standard with the IET at a time when the UK is accelerating towards its 2030 clean energy goals. BS 7671 underpins safe, modern electrical infrastructure, essential for delivering the electrification needed to meet net zero ambitions."

Further changes are included throughout all parts of BS 7671:2018+A4:2026, including the incorporation of Amendment 3:2024 to BS 7671:2018 as part of the main document.

This Amendment sees the further adoption of CENELEC Harmonised Documents and IEC standards as the UK continues the inclusion of standards for new and developing technologies.

BS 7671:2018+A4:2026 is available for purchase via theiet.org/GetTheRegs – you can also learn more about the IET's guidance and training packages here too.ttleneck.