

ELECTRICAL INSPECTION AND TESTING

Over one thousand accidents at work involving electric shock are reported to the Health & Safety Executive (HSE) each year.

Faulty electrical installations and equipment are also a common cause of fires in commercial and industrial buildings, second only to arson.

It is essential that risks associated with electrical installations (often referred to as 'fixed wiring') and equipment are correctly assessed and controlled.

Legal requirements

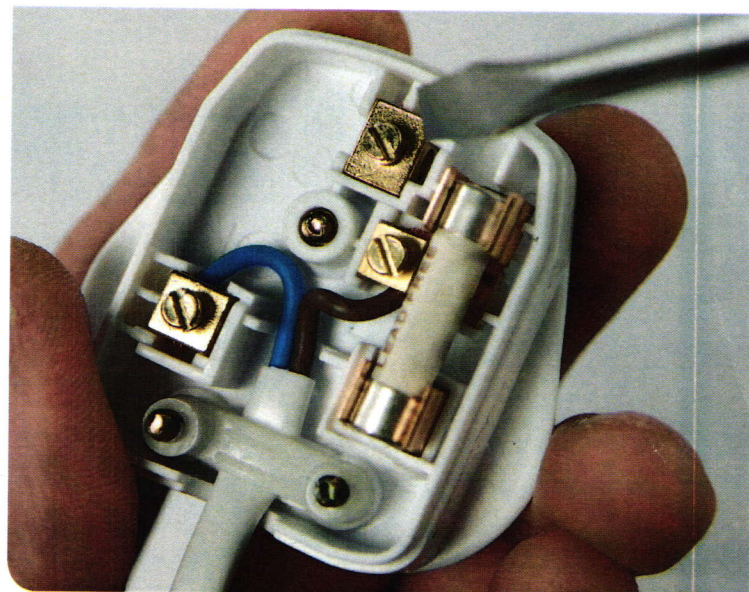
Electrical safety in the workplace is governed by the Electricity at Work (EAW) Regulations 1989. They require that the electrical system shall at all times be constructed and maintained "so far as reasonably practical, to prevent danger."

The word "system" includes fixed electrical installations, i.e. the wiring and switchgear installed in the building and permanently fixed equipment, such as; motors, compressors, heaters, lighting, etc.

IET Wiring Regulations BS 7671:2008

The EAW Regulations do not specify how frequently electrical equipment should be maintained or what records should be kept. These are covered in the Institution of Engineering and Technology (IET) Wiring Regulations BS7671 and the supporting IET publication Guidance Note 3: Inspection and Testing.

BS 7671 is a code of practice which is widely recognised and accepted in the UK. Installations that comply with BS 7671 are likely to satisfy the relevant parts of statutory regulations such as the EAW Regulations. However, in circumstances such as in licensed premises where specific requirements may differ from those of BS 7671, these will take precedence.



Periodic inspection and testing

The purpose of periodic inspection and testing is to provide an "engineering view" on whether the installation is in a satisfactory condition and can be used safely. This involves a detailed visual examination together with appropriate testing.

Based on IET recommendations, inspection intervals will normally range between 1 & 5 years, depending on the type of installation and occupancy. Typically

Industrial – 3 years

Offices – 5 years

Retail – 5 years

Educational establishments – 5 years

Restaurants and hotels – 5 years

Petrol filling stations - 1 year

Intervals less than those outlined may be recommended when the installation has suffered from neglect, or where it has been adversely affected by usage or environmental conditions.

A full list of all occupancies and the corresponding recommended inspection frequencies is published by the IET in Guidance Note 3.

Following the periodic inspection and test, an Electrical Installation Condition Report (formerly known as a periodical inspection report) is required, in which the installation is assessed in terms of its suitability for continued use as either "satisfactory" or "unsatisfactory".