



Portable Electrical Equipment

Annually, the HSE receives reports concerning electrical shock and burns at work involving approximately 1000 people, of which around 30 are fatal. Nearly a quarter of all reportable electrical accidents involve portable equipment. Most accidents are electric shock incidents, but many result in burns from arcing or fire. Conditions which lead to accidents include poorly made connections, insulation damage or failure causing leakage and exposure to live connections, misuse of equipment, servicing equipment without disconnecting supply, and failure to inspect and maintain the equipment.

MINIMUM STANDARDS

1. A risk assessment is carried out for each item of equipment, reflecting factors such as voltage, typical use and location of use e.g. there is high risk of mechanical damage in construction environments and there may be other hazards to consider such as trips over trailing cables.
2. All items of portable electrical equipment in use, including cable leads, are logged in a register and identified by a unique serial number. The register indicates how often each item should be recalled for routine testing, inspection and maintenance.
3. A documented policy/system is in place, with responsibilities stipulated, of 'risk based' inspection, maintenance, and testing of portable (and transportable) equipment in accordance with the register.
4. A formal documented visual inspection system regime is implemented including training and information to help employees carry out user checks. Information and guidance is provided to those responsible detailing the frequency of inspections, responsibilities, hazards to look out for and the procedures to follow when faults are found.
5. A competent person, as defined in the Electricity at Work Regulations 1989, is permitted to test equipment where it is suspected of being defective, is due for a combined inspection/test, or where competence is required due to the specialist nature/hazards of the equipment or the environment in which it is used.
6. Faults or defects are rectified immediately or the equipment removed from use until it is made safe.
7. Records of inspections, testing and maintenance are logged and kept for the life of the equipment plus 3 years.
8. Emergency and first aid procedures are in place to ensure shock victims receive quick and appropriate medical treatment.
9. A purchasing policy is in place ensuring that equipment is selected, where reasonably practicable, with the latest/best practice protections. This will include the use of reduced voltage systems (e.g. 110V centre-tapped to earth), insulation protections (e.g. double insulation), and with built in protections such as circuit breakers and residual current devices. Specialist equipment will be required for hazardous/flammable environments.

LEGAL REQUIREMENTS

The Electricity at Work Regulations 1989 require any electrical system (portable appliances are systems) to be constructed, maintained, and used so as to prevent danger. The IEE Regulations (BS 7671) make recommendations for the inspection and testing of electrical installations. The Management of Health and Safety at Work Regulations 1999 contain provisions for risk assessment, and the Provision and Use of Work Equipment Regulations requires the provision of suitable & safe work equipment. Insured's should also consult the various legislation covering duties where equipment is used in explosive atmospheres.

GUIDANCE & USEFUL INFORMATION

- HSE Website electricity pages: www.hse.gov.uk/electricity/index/htm

For further information contact RM@UK.qbe.com