

Electrical Safety Policy

The University recognises that electricity presents a risk from the campus generation and distribution network, from fixed wiring installations within buildings, and from equipment and portable appliances used by staff, students and contractors. There is also a risk presented by electricity during some research activities, which, although bound by this single policy, are subject to separate detailed arrangements. There is a risk of electric shock to individuals, and a risk of damage to equipment and installations, including the risk of fire or explosions caused by overheating or arcing.

The Electricity at Work Regulations 1989 are relevant to all activities carried out on the University campus, including research activities, and there is no such thing as a safe voltage: all voltages must be considered to present a risk to individuals and to equipment and installations.

This Electrical Safety Policy applies to electrical equipment and systems across the University's campuses, including Gibbet Hill and Wellesbourne, and applies to all portable appliances, fixed wiring systems and temporary installations.

This Policy is supported by arrangements, instructions, and guidance on electrical safety management which are available on the University's Health and Safety web pages.

Under the provisions of Ordinance 18, Health and Safety in the University, it shall be a duty of all staff, students and others working in the University to comply, as far as it is appropriate, with The Statement of Health and Safety Policy, together with any other rules and guidance that may apply. The Electrical Safety Policy, together with supporting arrangements, instructions and guidance on electrical safety management, form part of the rules and guidance issued pursuant to The Statement of Health and Safety Policy.

Core Principles

1. The University of Warwick Electrical Safety policy is for "No Live Working" to be carried out. In very exceptional circumstances though, limited types of Live Working or Live Testing might be necessary and can be justified in line with the requirements of Regulation 14 of the Electricity at Work Regulations. Where this is the case such work can only be carried out when all of the suitable precautions (including where necessary the provision of suitable protective equipment) can be taken to prevent injury, and all such work must be supported by the University's Live Working authorisation documents. Such work must be approved in advance and carried out under the control of the University's Electrical Services Maintenance Manager and Fixed Wire Testing Officer. A permit will be required in accordance with the University Permit to Work system to support this action and give access to spaces such as Low Voltage switch rooms.
2. On occasions when live testing and diagnostic work needs to be carried out (whether on fixed wiring installations or research equipment) all such work must be justifiable under Regulation 14 of the Electricity at Work Regulations, must be risk assessed and suitable control measures must be in place before anyone is allowed to test live circuits.

3. Where circuits are to be isolated to enable safe working, they must be 'locked off' with a suitable pad-lock (or similar device) and safety notices applied to the isolated circuit(s) at the point of isolation. This should be supported by a suitable Permit to Work so that any unplanned re-energisation of the isolated circuit(s) can be prevented.
4. Excavations must not take place over, or near to, live distribution cables without a Permit to Dig, which covers requirements for cable location and appropriate digging techniques, being in place.
5. Fixed wiring installations (i.e. the single phase and three phase wiring and associated equipment installed to or within the fabric of buildings) shall be installed to the current edition of BS 7671 (the Wiring Regulations) and formally inspected and tested before being put into service and thereafter at intervals recommended by the Institution of Engineering and Technology (IET). All work on fixed wiring installations must only be carried out by Estates staff or Estates approved contractors and all such individuals must be appropriately qualified and competent. All organisations appointed as approved electrical contractors must be registered with a recognised approval body.
6. Only a suitably qualified and competent person may work on or near electrical systems or equipment, especially those involved in design, construction and operation of electrical systems (including purpose-built research apparatus): those who do not possess the required knowledge or experience must be under an appropriate degree of supervision, having regard to the nature of the work.
7. Newly acquired electrical equipment must conform to CE/British Standard certification and marking requirements prior to being used on campus, be fit for purpose and free from latent defects.
8. Portable Appliances (i.e. movable electric appliances which can be connected to an electrical supply through the use of a lead and plug), must be visually inspected in accordance with the University's Portable Appliance Testing (PAT) arrangements as detailed on the University's Health and Safety or the Estates Department web pages. Good working practice would be to visually inspect the equipment before each use and, only if necessary, formally tested, on a risk based periodicity, in line with HSE guidance.
9. Electrical equipment which might be exposed to mechanical damage, effects of weather or wet, dirty, dusty or corrosive conditions must be appropriate for such environments by design, construction and installation.
10. Electrical equipment which might possibly be used in any potentially flammable or explosive atmosphere, including dusts, vapours or gases, must be of such construction (or appropriately protected) as to prevent danger arising from its use and such exposure.
11. Planned Preventative Maintenance (PPM) testing and inspections should be carried out on any electrical installations or equipment on a risk appropriate basis.
12. Electrical equipment developed within an academic department solely for use in a research environment must not be energised without having been visually inspected, electrically tested, formally risk assessed and approved by the Principal Investigator, or some other competent member of staff.

Responsibilities

The Director of Estates is responsible for implementation of this Policy as it applies to Estates Office staff and any contractors who they engage. The Director of Estates is ultimately responsible for ensuring that all new fixed installations are designed, installed and tested to the required standard.

Heads of Departments (HoDs) are responsible for the implementation of this Policy within their respective Departments and for its communication to their staff and students. All staff and students within departments must comply with this Policy and the associated arrangements, instructions and guidance on electrical safety.

HoDs are responsible for ensuring that Principal Investigators working with electrical equipment intended for use research purposes only, and which have been fabricated within their department (i.e. not purchased as a catalogue item), are made responsible for the safety of that bespoke research equipment and any associated safety devices, safe working procedures, and inspection and testing.

The University Electrical Services Maintenance Manager and Electrical Testing Officer is responsible for supporting the Director of Estates in relation to the day to day electrical safety management and for the maintenance and communication of the detailed arrangements, instructions and guidance. They will also act as the competent person for the University Electrical related issues. The Electrical Services Maintenance Manager and Electrical Testing Officer is also responsible for ensuring that records of maintenance and testing carried out on fixed installations are maintained, and, through close work with departments, ensuring that PAT records are also maintained.

The Director of Health and Safety is responsible for advising on the standards and regulations that must be achieved in order to meet legal requirements; for keeping the University's Health and Safety website up to date with the related policy documents, linking such pages to any relevant Estates or departmental arrangements, instructions and guidance; and for ensuring that spot checks and audits are carried out to provide assurance that activities are being carried out in compliance with this Policy.

Review

This policy is dated March 2019. The policy will be reviewed at least annually.

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