



Electrical safety - inspection and testing of portable electrical appliances

Introduction

The Electricity at Work Regulations 1989 require that all portable electrical appliances, i.e. those connected to the electricity supply with a plug, are maintained to prevent danger from electricity. Accepted "best practice" for this maintenance involves a combination of regular inspections and tests, both of which should be recorded.

Policy

1. The Estates Department shall maintain a register of all portable electrical appliances and associated maintenance records. Individual schools and departments will be responsible for advising Estates that new equipment should be added to their section of the register.
2. Preventative maintenance of electrical equipment will be a combination of daily visual inspections of electrical equipment by its users, and planned maintenance in the form of Portable Appliance Testing (PAT), by the Estates Department.
3. There are some Schools and Departments, which employ staff with the appropriate competences to undertake electrical testing 'in house', (e.g. Physical Sciences, Engineering and Digital Arts and Information Services). Such members of staff must be approved by the appropriate electrical engineer in the Estates Department, as being competent to undertake PAT testing.
4. In all cases electrical tests carried out must be recorded and the equipment tested identified with a test label, which should show the date when the next test is due.
5. Portable electrical equipment should not be used beyond the date specified on the label.
6. Any faults or defects identified during visual inspections should be notified to Estates Helpdesk and that piece of equipment taken out of service until a competent repair has been undertaken.

Implementation

When new electrical appliances are obtained, the details of the acquisition i.e. type, identification number if appropriate, date of acquisition, place of use, etc. must be notified to the Estates Department so that its register can be updated. The equipment will then be incorporated into the inspection and testing regime.

User checks

All staff should have received general advice on electrical safety, via training and the General Advice on Electrical Safety document on the Safety, Health and Environment website. Heads of School/Department should also ensure that research students, particularly those carrying out practical work in the laboratories, also make regular user checks on the electrical equipment they use.

Simple visual inspections should include:

- Checking cables for breaks, wear or contamination
- Checking the test label date is valid
- Checking that the plug(s) are undamaged and that all external screws are tight
- Checking the fuse rating is correct on new equipment (this should be indicated on the outside of the plug) and should comply with the information in the manufacturer's literature. *i.e. a 13 amp fuse must not be used on an item requiring a 3 amp fuse.*
- On computing equipment check for excessive noise or heat generation.
- ANY of the above should be reported to Estates Helpdesk, or an approved competent electrical person 'in house', if one exists.

Note that equipment without UK plugs should be used only for brief periods of time, using an adaptor suitable for the appliance. Longer term use of such equipment will require Estates to fit a UK plug.

Formal visual inspections

Formal visual inspections of electrical equipment will be carried out as part of the routine workplace inspections, which should be undertaken at least once per term.

These inspections will be undertaken by the equipment users in the presence of the workplace manager and the local Safety Co-ordinator. Such inspections will generally follow the guidelines above for visual inspection, but will be formally recorded.

Formal inspections and tests (PAT testing)

The frequency and extent of testing will be determined by an electrical engineer in the Estates Department and will be based upon the type of equipment, its frequency of use and its risk level.

Estates will maintain the registers for schools/departments or locations, but must liaise with them to determine the accuracy of the equipment registers.

Note that it is not possible to test equipment without UK plugs; any found during routine tests, unless used only briefly by a visitor, will be taken out of use unless a UK plug is fitted and tested.

Records

The Estates Department will collate and maintain the records of inspections and tests. Individual appliances will be identified by number and bar code labels and will be fitted with labels bearing the legend

"Tested for electrical safety[date]....."

Re-test due[date]....."

Monitoring

Heads of School/Department must ensure that there are departmental procedures in place to check that the above requirements are being fully implemented within their department.

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