

PAT Procedure

for

Campus, Sports Ground & Halls of Residences



Document Control	
Document Title: PAT Procedure for Campus, Sports Ground & Halls of Residences	
Document No.: 14	Author: Paul Franklin
Version No.: Ver 2.1	Document Status: Final
Superseded Version: PAT Policy 2011	Reviewed by: Paul Franklin / Jasinder Sidhu
Date of Next Review: 13.04.23	

Index of Review Dates and Amendments:

DATE	AMENDMENTS	NAME
23/01/2019	New template upload & incl of residences	DD
30/01/2020	Review	DD
13/04/2021	Review – add Sports Ground and minor amendments	PF / JS

Portable Appliance testing

The Estates Division (Maintenance) PAT policy follows : The H&S at Work Act 1974, The Management of H&S at Work Regulations 1999, The Electricity at Work Regulations 1989, The Workplace (Health, Safety and Welfare) Regulations 1992 and the Provision and Use of Work Equipment Regulations 1998.

The H&S at Work Act 1974 puts the duty of care upon both the employer and the employee to ensure the safety of all persons using the work premises.

The Management of H&S at Work Regulations 1999 refers to the employer's obligation to make suitable and sufficient assessment of the risks to H&S of his employees and persons not in his employment but affected by his conduct.

The Provision and Use of Work Equipment Regulations 1998 states: "Every employer shall ensure that work equipment is maintained in an efficient state, in efficient working order and in good repair." This include all work equipment (fixed, transportable, or portable) connected to a source of electrical energy, it does not apply to fixed installation in a building. Regulation 4(2) of the Electricity at Work Regulations 1989 says 'As may be necessary to prevent danger, all systems shall be maintained so as to prevent, so far as is reasonably practicable, such danger.

The Portable Appliances tests are carried out by a Company who specialises in PAT testing who are selected from the LUPC framework. The LUPC framework take a risk-based approach to Responsible Procurement in order to make the maximum impact on the supply chain with available resources, using the Commodity Coding Risk Analysis created by HEPA with input from LUPC. A mini tender will be carried out and the company will be appointed on a 3-year contract.

The company will submit Risk Assessments, Method Statements and named individuals ensuring they have the relevant qualifications to carry out this task and insured.

The contractor must comply with all current regulations and good practices and will inform the Maintenance section of any faults found.

The H&S Executive offers no absolute rules on the frequency of the testing and inspection of portable appliances. The Memorandum of Guidance on the Electricity at Work Regulations suggests that a regular inspection of equipment is essential. The reason for not having times specified is that the frequencies of testing depend on frequency of use, the environment in which the equipment is used; the users, the equipment construction and the equipment type (e.g. handheld).

Having assessed the above legislation and regulations the Maintenance Section endeavour to carry out Portable Appliances Testing every 3 years adopting a rolling annual programme to cover all Campus buildings and yearly testing at the Halls of Residence and Sports Ground. We will endeavour to carry out higher risk areas such as catering, maintenance workshops and cleaning equipment annually.

We aim to review the results when received and assess whether frequencies need to be adjusted, any changes will be reflected in the new contract.

The PAT test includes a visual inspection for damage to the appliance, electrical test to include earth bond continuity test, installation resistance test, functionality checks. One area that we aim to concentrating on in particular is to ensure that correct fuses are in place in the plug tops.

We encourage all staff to look critically at the electrical equipment which they use and look for damage to the outside of the equipment and its lead and plug before they use it, but they should **not** take the plug apart.

Only accessible equipment will be PAT tested.

See Appendix A for Portable Appliance Testing Specification.

It is important to note that where equipment is found to be faulty or condemned it will be dealt with as follows:

- If the equipment was supplied by the Estates Division (desk lamps, fans etc) then the equipment will be replaced / repaired by the maintenance team or by an approved contractor.
- If the equipment is such that we have no competence to repair, e.g. fridges, microwaves etc. then the relevant department will need to arrange for the equipment to be replaced.
- If the equipment was supplied by a different department (such as IT, Telecoms etc), the repair or replacement will be referred to the relevant department.
- If the equipment was a personal equipment to the user, it will be up to him/her to repair or replace it. Please note that employees should only be able to bring their own electrical equipment to use if the following 3 criteria can be met:
 - 1) They have permission from their line manager.
 - 2) Estates approve that the equipment is suitable to be connected to LSE installations, covering things such as loading, fire risk, effect on electrical protective systems e.g. circuit breakers etc. A job request is to be raised for the Estates Division to attend to this.
 - 3) The equipment is subject to regular visual inspections/checks by user and PAT testing by Estates at appropriate intervals.

It is prohibited that staff bring in certain types of equipment, such as heaters and cooking appliances (toasters, sandwich makers etc.). For other items please check with your manager or Estates Division.

The testing engineer will put a notice to advise that the equipment is not safe to use, the plug top will be cut off to disable the equipment from being used and will inform the Estates Helpdesk who will in turn inform the Departmental Manager and arrange for the equipment to be either repaired, replaced, or disposed of. Maintenance will only replace equipment which they have supplied. It is down to the individual departments to replace their own equipment.

All PAT testing records and frequencies will be centrally held on the P:Drive.

All users of the portable appliances have a duty of care to report to the Estates Helpdesk any damage they may observe between the periods of testing. Any reports will be investigated and where necessary the equipment will be removed, replaced, or repaired. To report faults with any portable equipment the user will raise the necessary request via the Planon maintenance system.

Appendix A

LSE Main Campus, Sports Ground and Residence Portable Appliance Testing Specification

- Main Campus testing to be completed over a three-year period (subject to review of the results after the testing programme).
- All Halls of Residence sites to be tested yearly
- All Catering areas to be tested yearly
- All Workshop areas to be tested yearly
- Sports Ground to be tested yearly
- All testing to be carried out during normal working hours at Residences and out of hours on Campus
- All appliances to scheduled and be tested in situ

Visual inspection will check for the following:

- Damage, e.g. cuts, abrasion (apart from light scuffing) to the cable covering;
- Damage to the plug, e.g. the casing is cracked or the pins are bent;
- Non-standard joints including taped joints in the cable;
- The outer covering (sheath) of the cable not being gripped where it enters the plug or the equipment. Look to see if the coloured insulation of the internal wires is showing;
- Equipment that has been used in conditions where it is not suitable, e.g. a wet or dusty workplace;
- Damage to the outer cover of the equipment or obvious loose parts or screws; and
- Overheating (burn marks or staining). In addition, formal inspection could include removal of the plug cover and checking that
 - A fuse is being used (e.g. it is a proper fuse **not** a piece of wire, a nail etc.);
 - the cord grip is holding the **outer** part (sheath) of the cable tightly;
 - Fuses are to be replaced if and when required
 - The wires, including the earth where fitted, are attached to the correct terminals (see diagram on inside of front cover);
 - No bare wire is visible other than at the terminals;
 - The terminal screws are tight; and
 - There is no sign of internal damage, overheating or entry of
 - Liquid, dust, or dirt. This does **not** apply to moulded plugs where only the fuse can be checked.
- Once tested each appliance to be labelled with an ID number and engineers name
- Electronic copies of tests are to be provided, per building
- All testing schedules are to be agreed in advance and communicated to staff and students.
- Teaching Rooms and Catering areas are to be programmed to be tested during closure periods where possible to minimise any disruption.
- Any equipment that fails its test is to be reported to Estates Helpdesk (Campus) or Front of House Manager (Halls of Residence) and Head Grounds person (Sports Ground)

- Any equipment that fails its test and is deemed a danger is to have its plug top removed and is to be reported to Estates Helpdesk (Campus) and Front of House Manager (Halls of Residence) and Head Grounds person (Sports Ground).