Cranleigh Parish Council

Portable Applicance Testing (PAT) Policy

What Does the Law Say?

Electrical equipment must be maintained in a state that avoids causing danger, but the law does not say how or how often inspection or testing needs to be carried out. The level of maintenance needed depends on the risk of an item becoming faulty, and how the equipment is constructed. Contributing factors include:

- the increased risk if the equipment is not used correctly, is not suitable for the job, or is used in a high risk environment
- if the item is not double insulated.

The equipment to be inspected and tested includes any electrical equipment used by employees at work, whether it is their own or supplied by the Council. There is a joint responsibility with the lessor or contractor to maintain any equipment used by employees that is either leased (e.g. a photocopier) or provided by a contractor.
This policy follows guidance issued by the Health and Safety Executive and, if followed, should enable the Council to comply with the law.

Not every electrical item needs a portable appliance test (PAT)

In some cases, a simple user check and visual inspection is enough, e.g. checking for loose cables or signs of fire damage and, if possible, checking inside the plug for internal damage, bare wires and the correct fuse. Other equipment e.g. a floor cleaner or kettle may need a portable appliance test, but not necessarily every year.

Definition of Portable and Movable Equipment

A portable or movable electric appliance is any item that can be moved, either connected to or disconnected from an electrical supply. Portable or movable items generally have a cable and a plug. Portable and movable equipment includes the following:

- electrical equipment that can be easily moved around, such as kettles, vacuum cleaners, floor polishers, portable heaters, fans, desk lamps, radios, PCs and laptops, PC projectors, small appliances such as irons, hair dryers and kitchen equipment including food mixers, toasters etc;
- larger items that could be moved (but only rarely), e.g. water chillers, fridges, microwaves, photocopiers, electric cookers, fax machines, desktop computers, etc ;
- mobile phone and other battery-charging equipment that is plugged into the mains (but the phones themselves and any other battery-operated equipment would not be included); and
- extension leads, multi-way adaptors and connection leads.
- hand-held items that do not have a plug but have been wired in (or fixed) are still considered to be portable appliances, but large electrical items, such as water boilers that are wired in, are not portable appliances as they are not designed to be moved and would come under the scope of fixed installation maintenance;

Ensuring the safety of Portable Electrical Equipment
The following standards reflect current guidance, but the inspection and testing regimes should be reviewed periodically to see whether inspection and/or testing intervals could be decreased or should be increased. Damaged or faulty equipment that is identified by these inspection and testing regimes will be removed from use immediately and either repaired by a competent person or disposed of at a recycling centre to prevent its further use.

User checks
With the equipment disconnected, users of equipment should carry out checks before most electrical equipment is used. Employees should look for:

- damage to the lead including fraying, cuts or heavy scuffing, e.g. from floor box covers;
- damage to the plug, e.g. to the cover, or bent pins;
- tape applied to the lead to join leads together;
- coloured wires visible where the cable joins the plug (the cable is not being gripped where it enters the plug);
- damage to the outer cover of the equipment itself, including loose parts or screws;
- signs of overheating, such as burn marks or staining on the plug, cable or piece of equipment;
- equipment that has been used or stored in unsuitable conditions, such as wet or dusty environments or where water spills are possible; and
- cables trapped under furniture or in floor boxes.

Visual inspections
*A*ll portable equipment should be visually inspected at intervals between six months and four years, depending on the type of equipment. Table 1 gives an indication of where a visual inspection should be sufficient and where testing may be needed in order to comply with the law. It also suggests intervals for the different types of checks.
A visual inspection does not need to be carried out by an electrician, but the person carrying it out does need to know what to look for and, through training, have sufficient knowledge to avoid danger to themselves and others. Factors to be considered include:

- the electrical equipment is being used in accordance with the manufacturer's instructions;
- the equipment is suitable for the job;
- whether there has been any change of circumstances;
- a user has reported any issues.

The visual inspection should include the user checks listed above and, where possible, will include removing the plug cover and checking internally that:

- there are no signs of internal damage, overheating or water damage to the plug;
- the correct fuse is in use and it is a proper fuse, not a piece of wire, nail etc;
- the wires, including the earth where fitted, are attached to the correct terminal;
- the terminal screws are tight;
- the cord grip is holding the outer part (sheath) of the cable tightly;
- no bare wire is visible other than at the terminals.

For equipment/cables fitted with moulded plugs, the fuse is the only part that can be checked.

Portable appliance test (PAT)

The decision on whether to test electrical equipment needs to consider the type of construction of the equipment in use. There are two basic types of electrical equipment construction – Class I (earthed) and Class II (double insulated).

Class II equipment is marked with a symbol. If this symbol cannot be seen, it must be assumed that the item is a Class I appliance and a portable appliance test carried out.

 Class I Earthed equipment

For safety reasons, Class I equipment has an earth connection. If there is a fault within the equipment there is a possibility that the outside of the equipment could cause an electric shock if the earth connection is not there. As a result, it is recommended that Class I equipment has a portable appliance test to ensure the earth connection is sound.

Class I equipment must have a portable appliance test (including leads) at intervals which could be between one and five years, depending on the type of equipment.

A portable appliance test does not need to be carried out by an electrician, but greater knowledge and experience is needed than for inspection alone, and the person performing the test must have the right equipment for the task. They should know how to use the test equipment and how to interpret the results. The Parish Council will provide training for the member of staff that undertakes PAT testing.

It is important to continue to carry out user checks and visual inspections of electrical equipment that has been tested because portable appliance testing can only give an indication of the safety of an appliance at the time of the test and does not imply that the item will be safe for a further period of time.

 Class II Double insulated equipment

Class II equipment is sometimes referred to as ‘double insulated’ equipment. This means that there is extra insulation within the construction of the equipment to prevent accidental contact with live parts, even if there is a fault. Class II equipment does not need an earth connection to maintain safety. It will not need a portable appliance test, although user checks and visual inspections must continue to be carried out as the integrity of the equipment casing is a key safety feature.

April 2019

Policy Review Date: April 2022