

Portable Appliance Testing

Portable Appliance Testing (PAT) is the regular inspection and testing of electrical equipment and associated leads/plugs to ensure the safety of those who utilise the equipment.

All electrical appliances classed as portable or transportable, i.e. any equipment that has a flexible cable and/or plug fitted for mains operation requires a periodic safety check.

For example :

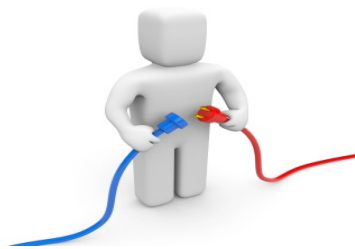
- Photocopiers
- Computers, printers etc
- Hand held power tools
- Vacuum Cleaners
- Microwaves, kettles
- Extension leads
- Fans, table lamps etc

Portable Appliance Testing (PAT), is part of a requirement of the Electricity at Work Regulations 1989 (regulation 4 (2)), to maintain electrical equipment in a safe condition, and is an important part of any Health & Safety Policy.

Who does it affect?

The Electricity at Work regulations 1989 affects many premises such as:

- Factories
- Offices & shops
- Construction sites
- Hotels & Conference Centres
- Schools
- Community Centres Church Halls etc
- Restaurants Rented properties
- Where appliances are hired/ repaired



All equipment that belongs to these premises should be tested to ensure continued safety of such items. This is particularly important if equipment is accessible to the general public, e.g. in hotels or community centres etc. Any additional equipment that is brought into such premises (e.g. contractors tools, audio-visual and disco equipment) should also be tested.

What does it involve?

Correct PAT testing **MUST** be performed by a competent/trained person and should include the following checks:

- Suitability of equipment for environment
- Damage to plug or loose cable retention
- Damage to cable or bad joints in cable
- Damage to equipment casing
- Signs of overheating
- Correct fuse rating & wiring inside plug
- Insulation & Polarity tests (Class 1 & 2)
- Earth Bond test (Class 1 only)
- Identification and recording of all units tested

The function of such testing is to ensure that any unsafe equipment is removed from service immediately, and ensure that your company, customers and staff are protected from possible electrical hazards.

Note: Special care must be taken when testing it equipment as applying the incorrect test can cause damage to the equipment.

Frequency of testing

The frequency of inspection & testing required can vary depending on several factors, such as:

- Environment - Equipment in a harsh environment is likely to suffer more damage than equipment in a benign environment (i.e. A construction site as opposed to an office)
- Users - If equipment is likely to receive unreported abuse, more frequent inspection & testing is required.
- Equipment construction - The safety of Class 1 equipment is dependent upon a good connection with earth; Class 2 equipment is not dependent upon a fixed earth.
- Equipment type - Appliances that are hand-held are more likely to be damaged than fixed appliances.



The legal requirement for electrical equipment testing is based on the following:

The Health and Safety at Work Act 1974

"Places a duty of care upon the employer (Sections 2,3, and 4) and the employee (Section 7) to ensure the safety of all persons using the work premises including the self employed"

The Electricity at Work Regulations 1989

"As may be necessary to prevent danger, all systems (including equipment) shall be maintain so as to prevent as is reasonably practicable such danger"

The Management of Health and Safety at Work Regulations 1999

"Every employer shall make a suitable and sufficient assessment of the risks to the health and safety of his employees to which they are exposed whilst they are at work"

The Provisions and use of Work Equipment Regulations (PUWER) 1988

"Every employer shall ensure that work equipment is maintained in an efficient working order and in good repair and that inspection is necessary when equipment or parts of equipment will deteriorate and lead to danger and this will not be picked up through operator checks and normal servicing"

For all your procurement requirements call:

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Without a valid certificate of testing you run the risk of invalidating your commercial insurance policy or even prosecution.