

Simply Safety:

Electricity

Electricity – a powerful force

Electricity is found in just about every workplace, from offices and shops to factories and on construction sites. It powers office machinery, computers, hand tools and all types of machine tools. It is clean, quiet, efficient and usually safe, making it the most common method of powering machinery.

But it can be dangerous too, with around 1,000 electrical accidents reported each year, causing 25 deaths.

So remember to treat electricity with respect and use it sensibly.

Key Facts about Electricity

- **What's the problem?**

Electricity causes fires and can injure people if mis-used.

These risks can be controlled by ensuring that:

Electrical installations and wiring are fit for purpose

The correct safeguards and precautions are used e.g. circuit breakers (RCDs)

All people who work on or with electrical equipment are trained and aware of the risks

The additional risks associated with portable equipment are managed

- **Plugs and sockets**

Plugs, sockets and wiring should be designed and installed for the use in question and not overloaded.

They should be inspected at regular intervals to ensure they remain in good condition and keep a record of your inspections.

- **Electrical work and wiring**

Work on electrical installations should only be undertaken by experts.

Ideally, no work should be carried out on live equipment.

Electricity should be isolated (switched off) and made safe before work commences.

- **Portable equipment**

Portable equipment needs more frequent checking - set up a Portable Appliance Testing PAT programme.

Keep records of your inspections - they are essential for managing the regular inspections of portable equipment.

Train employees to inspect portable tools every day.

Use circuit breakers whenever electric tools are used outside, in wet or similar higher risk environments.

Consider whether the risks of using portable electrical equipment are too great. Can the risks be controlled by use of reduced voltages e.g. 110v supplies? Are there alternative means of working?

- **Special risks**

Treat all overhead cables as "live". Contact with overhead live wires can prove dangerous. When digging, check for the presence of underground cables. Contact with a buried cable can prove fatal and will cause massive interruption to the work being carried out.