

Unit 202: Electrical principles and processes for building services engineering

Outcome 3

Procedures for safely isolating supplies

Safe isolation

This is important to undertake before any kind of work starts on electrical appliances.

Pumps



Showers



Programmers



Safe isolation

Thermostats



Immersion heaters



Plugs/spurs



Safe isolation

Boilers



Cookers



Valves

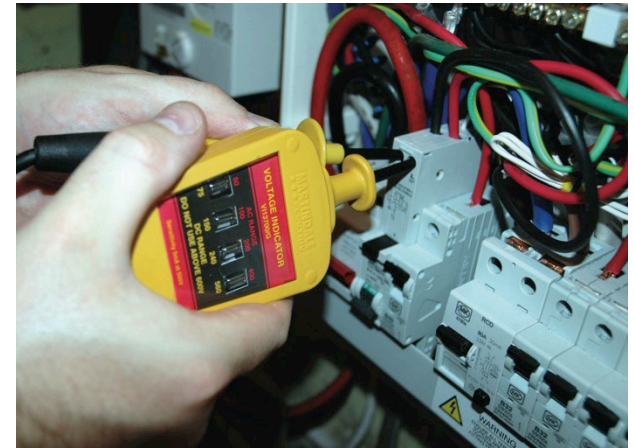
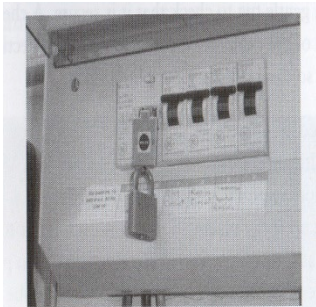


Safe isolation



Approved
voltage tester
with proving unit

Locked off and
labelled



GS38 The HSE testing
equipment standard

(Test probes max
4mm, preferably 2mm)

Safe isolation

1. Test the voltage indicator on a **known source** (proving unit).
2. Prove the appliance is **live**: place probes onto the live and neutral on the appliance mains connection – voltage indicator lights up - test between all combinations of terminal wires, L-N, L-CPC, N-CPC.
3. Identify the source for the supply ie MCB or fuse.
4. Switch off MCB, lock and label, or remove fuse, lock and label.
5. Go back to appliance and prove appliance is **dead**: place probes onto the live and neutral on the appliance mains connection – voltage indicator does not light up. Test between all combinations of terminal wires, L-N, L-CPC, N-CPC
6. Re-test the voltage indicator on a **known source** for a second time (proving unit).

Safe isolation

The correct locations to carry out safe isolation are:

- Consumer unit
- Fused spur
- Switch fused spur

Always lock and label to avoid the supply being switch back on by mistake (retain fuse).

