

Electricity at Work Regulations (EAWR 1989)

Regulations 12-13



Means for cutting off the supply and for isolation

- Subject to paragraph (3), where necessary to prevent danger, suitable means (including, where appropriate, methods of identifying circuits) shall be available for
 - (a) cutting off the supply of electrical energy to any electrical equipment; and
 - (b) the isolation of any electrical equipment.
- (2) In paragraph (1), "isolation" means the disconnection and separation of the electrical equipment from every source of electrical energy in such a way that this disconnection and separation is secure.
- (3) Paragraph (1) shall not apply to electrical equipment which is itself a source of electrical energy but, in such a case as is necessary, precautions shall be taken to prevent, so far as is reasonably practicable, danger.



Means for cutting off the supply and for isolation

The suitable means of isolation of equipment (regulation 12(1)(b) should:

- (a) Have the capability to establish a suitable air gap or other effective dielectric (Voltage dependent, consult relevant standards).
- (b) Prevent unauthorised interference or improper operation *i.e.* a means of locking off.
- (c) Be readily accessible.

BS7671 IET Regulations 460 to 462 and 537 refer also Table 537.4



Precautions for work on equipment made dead

Adequate precautions shall be taken to prevent electrical equipment, which has been made dead in order to prevent danger while work is carried out on or near that equipment, from becoming electrically charged during that work if danger may thereby arise.



Precautions for work on equipment made dead

Regulation 13 relates to situations where equipment has been made dead in order that work on it or near it may be carried out without danger.

This work may be electrical or non electrical work.

In some instances Regulation 12(1)(a) will suffice i.e. cutting off the supply to make dead. e.g. Lamp changing providing the person doing the work has control over the switch.

Where isolation is also required, a lockable device is desirable but may not be available. In such cases removal of fuses or links can secure isolation provided they are held in safe keeping with proper control procedures in place.



Precautions for work on equipment made dead

All the previous precautions will prevent the equipment from becoming charged by connection to its own normal source of energy but may not alone be sufficient to prevent charging form electromagnetic induction, mutual capacitance or stored electrical energy.

It may be necessary to apply (temporary earths) for the duration of the work.

Where work is to be done on or near conductors that have been isolated, the conductors should be proved dead at the point of work before work starts.

Where a test instrument or voltage indicator is used for this purpose it should be GS38 approved and itself proved before and after testing the conductors.



Precautions for work on equipment made dead

The safety isolation procedures should be formalised in written instructions or house rules.

Safety documentation, including 'permits-to-work', may form part of the written procedures and their use is considered essential to ensuring a safe system of work.

Properly formulated and regulated 'permit-to-work' procedures focus the minds of those issuing and of those receiving the permits, both on the manner in which the work is to be done and on how the equipment has been made safe.