

CHILDREN'S SERVICE

Local Code of Practice 21

Electricity at Work Regulations

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Children's Service Local Code of Practice No 21 Electricity at Work Regulations

References: The electricity at work regulations

GS 23 Guidance Notes from the HSE

Code of practice for in service inspection and testing of electrical equipment.

Introduction:

The electricity at work regulations 1989 came into force April 1st 1990 and have extended electrical safety legislation to almost all workplaces.

Definitions:

Duty Holder is the employee of educational establishment or a contractor who:

Designs, specifies, manages or maintains electrical systems or equipment or

Manages, supervises or controls work on or near electrical systems or equipment or

Undertakes work on or near electrical systems and equipment

Controls premises and/or uses electrical equipment within those premises.

This local code of practice contains the arrangements to be made to ensure that the employer (LA) and therefore the headteacher and governors in all areas of its undertaking involving electrical systems and electrical equipment, are complying with its general duty placed on them by the Electricity at Work regulations 1989.

Fixed Electrical Installations:

Fixed electrical installations which have been installed should be safe for general purposes provided they have been adequately maintained.

Inspection and Test:

It is recommended that Premises Controllers ensure that electrical installations are inspected and tested by a competent electrician at least every 5 years. Where experience shows that fixed installations are subject to abuse and/or damage more frequent inspection and testing will be necessary.

In addition, premises controllers should also ensure that the testing of the following items of equipment is carried out and maintained at the stated intervals:

Fire Alarms
Emergency Lighting
Kilns
Lightning conductors
Swimming pool plant
RCD's
13 weeks
6 months
12 months
12 months
12 months
12 months
12 months

All portable electrical appliances should be routinely inspected and tested. It is recommended that an inventory be kept and each appliance be given an identification number.

At the start of term, all apparatus should be given a visual inspection and any defects reported and rectified. This should include any equipment owned by staff but used in the workplace.

All class 1 earthed hand held portable electrical equipment such as drills, saws, irons etc should receive a detailed inspection and test by a competent person, who should record the results at least every 12 months

All class II (double insulated) hand held portable electrical equipment must be visually inspected for damage or defect by the teacher before use. This equipment should be subject to a detailed inspection and testing based upon experience and the frequency of usage of the equipment.

All extension leads should be tested as a class I appliance. Any extension lead without an earth lead should be taken out of service

Any power leads that are tested separately should be tested as follows

3 core leads class I test 2 core leads class II test

Portable Electrical Equipment owned by staff

Permission for the appliance to be used on the school premises should be sought. If the appliance is being left on site it will be classed as a school item and should be inspected and tested along with all other appliances.

Electrical equipment owned by contractors

Portable electrical equipment and any hand held tools owned by contractors are the responsibility of their owner and they must have systems in place to comply with the requirements of the regulations

Defective Equipment

Any portable appliance that is defective or had failed the PAT testing should be labelled and locked in a secure place to prevent unauthorised access until the equipment has been either repaired of disposed of safely.

Purchasing Equipment:

Suitability:

All portable electric tools, equipment and leads used as part of the LA's undertaking are to

- Be suitable for the purpose that they were intended
- Display a CE mark where appropriate
- Be of the applicable standard: BS, or equivalent European or other approved standard
- Be environmentally compatible, with regard to damp, dust or explosive/flammable atmospheres
- (For hand held tools), be either double insulated 110 v capacity or battery operated, class 1 portable hand tools are only be used as a last resort
- Be correctly fused

- (For extension cables) be a maximum 13 amp capacity, with three core cable if three pin sockets are fitted and should be fully extended.
- have instructions available on their correct use

Stage and Theatre Halls:

Experience has shown that the fixed electrical installation associated with stages and theatre halls in schools may be altered, modified, extended or otherwise changed. Any changes should only be made with the consent and approval of a competent person who is in overall control of the installation. These changes should be inspected and tested prior to use. Fixed installations should be inspected and tested annually.

Competence:

A competent person is someone who possesses sufficient technical knowledge, experience and skills to be able to carry out a specific task and prevent danger or injury arising during the course of the work, or as a result of the work.

Technical posts(Electrical and mechanical engineers)

The level of competence required of a technical post, whether management, supervisory or operative, must have included within the job description, a clear definition of the level of competence required of the post, expressed as a qualification e.g. City & Guilds or a membership of an appropriate professional body, plus relevant experience. This requirement should form the basis of any advertisement when advertising a post.

Non Technical posts:

Within individual schools and educational establishments posts are identified where the person is the duty holder(eg a Premises Controller). The Premises Controller or Managing Health & Safety training course must be attended to ensure that staff have an overview of the regulations.

Caretakers

Where posts identified in schools and educational establishments include a requirement to carry out minor electrical works (eg: changing light bulbs, fuses, plugs etc), employees shall be competent to carry out these works. Staff should have the appropriate knowledge to enable them to be able to recognise and prevent danger.

Electrical Safety (H & S for Caretakers) course provides basic training to meet the requirements of health & safety and is essential for the electrical work relating to caretakers duties. This course is mandatory for caretakers and should be updated every 5 years. Records of training must be kept.

In addition a course on electrical hand tool safety is available for staff who use tools such as a power drill, planer, orbital sander or jigsaw. This course is mandatory for staff prior to them using any electrical hand tools in school. This certificate will need to be updated every 5 years

Visual inspection checklist

Listed below is guidance on setting up and carrying out a visual inspection.

Visual Inspection – sockets, plugs and cables

1. Check sockets for cracks and/or pieces missing. Ensure that shuttering, where fitted, operates efficiently. Check that mounting is secure.

- 2. Check that plugs are in good condition without cracks and pieces missing. If the plug is damaged it should be replaced or the appliance taken out of use.
- 3. The cable clamp should grip the outer cable insulation firmly
- 4. Burn or heat marks could indicate a number of possible faults in the plug and the plug should be replaced or the appliance taken out of service.
- 5. Plugs should have the correct fuse for the appliance fitted
- 6. The flexible cable of the appliance should be examined for cuts, cracks, damaged insulation, fraying, ageing or damage caused by oils or acids
- 7. Check that they are no obvious signs of wear and tear at the cable entry to the appliance
- 8. There are no joints in the leads
- 9. Any cable that has been wrapped with insulation tape or any other tape should be regarded as suspicious and should be taken out of use
- 10. Only flexible cable of the current carrying capacity should be used.
- 11. Check that the length of the cable is appropriate for the use which will be made of the equipment.
- 12. Ensure that cables are placed so that they do not create a physical or electrical hazard to persons or equipment
- 13. Extension leads should only be used as a last resort and in no circumstances should be run from one room to another or across a room causing a trip hazard
- 14. On no account should an extension lead or cable be used in a coiled position as the heat generated on a coil may cause a fire hazard.
- 15. Ensure that the current carrying capacity of the cable is sufficient for the use to which it is being put. If in doubt take expert advice.
- 16. All defects should be reported for repair and defective equipment should not be used until repaired.

Fuses:

720 Watt 3 amp 1.2 KW 5 amp Over 1.2KW 13 amp

Note:

Certain equipment carries fuse protection for the supply lead only and this is always 13amp. Where this is the case, the equipment itself has an internal fuse protection.