

4.2 Buildings, Electricity and Gas Supplies

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Regulation and Standards

England

- Regulation 6: The quality and purpose of care standard
- Guide to the quality and purpose of care standard
- Regulation 46: Review of premises

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- Regulation 43: Overarching requirement
<https://www.legislation.gov.uk/wsi/2017/1264/regulation/43/made>
- Regulation 44: Premises accommodation-based services only
<https://www.legislation.gov.uk/wsi/2017/1264/regulation/44/made>
- Regulation 46: Single occupancy and shared rooms – children
<https://www.legislation.gov.uk/wsi/2017/1264/regulation/46/made>
- Regulation 48: Facilities and equipment
<https://www.legislation.gov.uk/wsi/2017/1264/regulation/48/made>

Scope of this chapter

The company will provide and maintain safe and healthy working conditions for employees; that are without risk to health and are adequate as regards facilities and arrangements for their welfare at work; maintain, plant, equipment and machinery, and ensure safe storage/use of substances.

System in place for routine inspections and testing of equipment and machinery and for ensuring that action is promptly taken to address any defects.

Toilets, washing facilities drinking water and sleeping facilities (where required) will be provided and maintained to satisfactory standards.

Relevant Chapters

Portable Electronic Equipment Procedure

1. Buildings

If staff become aware that any equipment, facilities or parts of the building are substandard or unsafe they should take reasonable steps to make the area safe and then report it immediately to the Registered Manager/Head Teacher. They will take responsibility for ensuring that proper steps are taken to address any concerns and sufficient to make the area safe and satisfactory.

There should be a single line drawing of the building showing floor plans with the isolation points for the electric, gas and water clearly highlighted. This plan should be displayed within the main office or in an easily accessible area for staff.

2. Electricity Supply

Electrical inspections need to be carried out 3 yearly for all residential properties and 5 yearly for other buildings. Any requirements identified in these inspections should be brought to the attention of the Facilities Manager to ensure the recommendations are acted on.

All inspection reports should be made accessible in the property and a copy sent to head office.

Beyond the setting of a trip switch, staff must not carry out work on, or tamper with any electricity supply cables, power points or electrical appliances. All new staff should be made aware of the location and function of trip switches.

If the trip fails more than once, it should not be reset; it should be taped over to prevent another staff member attempting to reset the circuit/device and the Facilities Manager responsible for maintenance should be contacted by phone or email and a record kept of action taken.

If a faulty or dangerous supply cable, power point, switch or appliance is discovered, staff should ensure the item is switched off, placarded and marked with a non-removable notice or removed as appropriate with due regard for safety. Then the Registered Manager/Head Teacher must be informed immediately. This applies particularly to items belonging to young people who are likely to ignore safety warnings.

The potential risks associated with electrical equipment in use in the home offices and schoolrooms etc. should be appreciated. **Electricity can kill.**

Electrical circuits should not be overloaded by the use of adaptors to serve a number of appliances. Independently fused, fixed multi-socket plug boards may be used instead, where appropriate. It is suggested that these should be used sparingly (for example for PC's only) and that flex lengths should be kept to a minimum (1 or 2 metres max). No more than one such adaptor may be used at any one mains outlet.

Block adaptors and plugging an extension lead into an extension lead are prohibited and only plug in one extension lead or cable drum per socket. Cable drums must be fully unwound.

Plugs must be correctly fused for the power rating of the appliance, and plug cables should be securely fixed by cable clamps.

Appliances should be switched off and unplugged after use and at night (unless the equipment concerned is designed to run continuously).

If additional heating is required only portable oil filled electric radiators and fan heaters may be used.

The use of open bar radiant fires and portable kerosene or gas heaters are prohibited.

3. Electrical Equipment

See also **Portable Electronic Equipment Procedure**.

New electrical equipment provided by the company must be marked before use with an appropriate sticker showing when it is to be first used. The company will avoid using second hand equipment where possible, but if it is used, then it must be P.A.T. tested and the item marked before use.

PAT testing will be required 2 yearly for the residential properties where an updated ASSET register should be made available to the contractor carrying out this service.

The school and offices are required 3 yearly these also require an updated ASSET register.

Additional to the testing's above it is the responsibility of Home managers and responsible individuals to ensure regular visual checks are done of the electrical items and finding's recorded.

The label/sticker must contain the following

- Unique identification code to enable equipment to be indefinable;
- The status of the equipment following the testing i.e. PASS or FAIL;
- The date the equipment was tested together with the re-test period or the re-test date;
- An Asset register is updated at each property and should be kept up to date.

Equipment failing the inspection and testing must be put beyond use and clearly labelled with a sticker indicating that it has failed.

Thereafter all portable electrical equipment will be tested at prescribed intervals following current guidance from the Health and Safety Executive.

If any person suspects that an electrical item is defective in any way, then it must not be used. It must be labelled as faulty and, if possible, removed to a secure place pending repair. Items beyond repair should have the plugs either removed or completely destroyed and suitably disposed of to prevent any possible use. Care must be taken not to cut leads so that a plug can be put into a socket and leave exposed wires that could be live.

Small electrical equipment bought by children for their own use will be inspected by staff as part of the welcome and admission process. If any item appears to be defective in any way, then the item will need to be removed from the young person so that a qualified person can carry out a formal check or repair. If necessary, defective equipment will be replaced at the company's expense.

The use of electrical equipment, bought onto the company's property by staff for their own use, must be authorised in advance by the manager or Head Teacher and visually inspected before use to ensure it is in a safe condition, the items should then be made available for PAT testing at the next opportunity.

If they have any doubts as to its safety, the equipment should not be used until a proper inspection and test can be completed.

4. Gas and Oil Safety

When a member of staff starts work at a premises for the first time they should be shown the location of all gas tanks or mains gas pipes and also how to operate the taps/main control valve that cut off and isolate gas supplies to the premises.

4.1 Gas and Oil Safety - Carbon monoxide awareness

Carbon monoxide (CO) is a highly poisonous substance produced by the incomplete burning of coal, wood, charcoal, oil, paraffin, gas and Liquid Petroleum Gas (LPG).

This happens when a gas appliance has been incorrectly fitted, badly repaired or poorly maintained. It can also occur if flues, chimneys or vents are blocked.

Oil and solid fuels such as **coal, wood, petrol and oil** can also produce carbon monoxide.

Because CO is odourless, colourless, and otherwise undetectable to the human senses, people may not know that they are being exposed. Increasing staff and children's understanding of the risks of CO poisoning and taking sensible precautions could dramatically reduce this risk.

Remember the six main symptoms to look out for:

1. Headaches;
2. Dizziness;
3. Nausea;
4. Breathlessness;
5. Collapse;
6. Loss of consciousness.

High level CO poisoning results in progressively more severe symptoms, including:

- Mental confusion;
- Vomiting;
- Loss of muscular coordination;
- Ultimately death.

Being aware of the symptoms could save lives.

Carbon monoxide symptoms are similar to flu, food poisoning, viral infections and simply tiredness. That's why it's quite common for people to mistake this very dangerous poisoning for something else.

Other signs that could point to carbon monoxide poisoning:

- Your symptoms only occur when you are at a specific location;

- Your symptoms disappear or get better when you leave that location and come back when you return;
- Others in your building are experiencing symptoms and they appear at a similar time.

What should I do if I experience any symptoms of carbon monoxide poisoning?

- Get fresh air immediately. Open doors and windows, turn off gas appliances and leave the building;
- See your doctor immediately or go to hospital - let them know that you suspect carbon monoxide poisoning. They can do a blood or breath test to check;
- If you think there is immediate danger, call the **Gas Emergency Helpline**;
- Get a Gas Safe or OFTEC registered engineer to inspect your gas appliance or oil fired equipment and flues to see if there is a dangerous problem.

Hazard indicators

There may already be signs of carbon monoxide. Any one of the following could be a sign that there is carbon monoxide in your building. Get your gas appliances checked to avoid carbon monoxide poisoning.

- The flame on your cooker should be crisp and blue. Lazy yellow or orange flames mean you need to get your cooker checked;
- Soot or yellow/brown staining around or on appliances;
- Pilot lights that frequently blow out;
- Increased condensation inside windows.

If you have a faulty appliance, it could lead to carbon monoxide poisoning. Get it checked as soon as possible by a Gas Safe or OFTEC registered engineer.

Hazard/Risk reduction

In addition to the proper installation and regular maintenance and certification of gas appliances and oil fired equipment by a Gas Safe or OFTEC registered engineer; all locations have CO detectors and alarms to further reduce the likelihood of Carbon Monoxide poisoning.

Standard, BS EN 50292, applies to selection, installation, use and maintenance - including siting of CO alarms; this can be dependent on a range of factors including the building layout and the manufacturer's recommendations.

Risk management

All appliances are installed and operated according to the manufacturer's instructions and local building regulations. Installation, is undertaken by qualified engineers, inspection and servicing on an annually basis is also completed by qualified engineers to ensure proper operation; which includes chimneys and flues being checked for blockages, corrosion, partial and complete disconnections, and loose connections.

Upon installation or servicing of these appliances a flue gas analysers (FGAs) test (ratio of carbon monoxide to carbon dioxide) coming out of the flue is also to be carried out and the details recorded on the installation or service certificate.

Risk reduction/General precautions

Never operate a portable generator or any other petrol engine-powered tool either in or near an enclosed space such as a garage, house, or other building. Even with open doors and windows, these spaces can trap CO and allow it to quickly build to lethal levels.

Never use portable fuel-burning camping equipment inside a home, garage, vehicle or tent unless it is specifically designed for use in an enclosed space and provides instructions for safe use in an enclosed area.

Never leave a car running in an attached garage, even with the garage door open.

Never use gas appliances such as ranges, ovens, or clothes dryers to heat your home.

Never operate unvented fuel-burning appliances in any room where people are sleeping.

Do not cover the bottom of natural gas or propane ovens with aluminium foil. Doing so blocks the combustion air flow through the appliance and can produce CO.

During home renovations, ensure that appliance vents and chimneys are not blocked for example by tarpaulins or debris etc.

Make sure appliances are in proper working order when renovations are complete.

Should you have any concerns about the possibility of Carbon monoxide poisoning it is suggested that you follow the guidelines in respect of a gas leak without delay.

Testing

CO alarms will require testing on a regular basis in line with the manufacturers recommendations; records of all tests and other action such as replacing batteries and detectors should be fully documented in the appropriate records.

Any other concerns should be directed to Senior Management.

4.2 Gas Leaks (Natural gas installations)

If a member of staff discovers or is informed of a gas leak, then they need to take immediate action as follows.

- Open all doors and windows to ventilate the room. Get fresh air immediately;
- Any naked flame in the area, must be extinguished;
- Switch off the appliance and do not reuse until it has been checked by a Gas Safe registered engineer;
- Shut off the gas supply at the mains;
- Call the relevant National Gas Safety number (see below).

Although not poisonous, people can be overcome by gas through lack of oxygen; therefore staff should exercise great care when entering a potentially gas filled room to investigate a leak. Even the smallest leak can produce a lingering smell that can make it difficult to detect the source.

Unless staff can detect the source with confidence and stop it easily i.e. by turning off the supply or disconnecting an appliance, they should call the relevant National Gas Safety number and also inform the Registered Manager/Head Teacher.

They must never attempt repairs themselves.

If a Carbon Monoxide alarm sounds, doors & windows should be opened and the building evacuated at once. If anybody may have been affected by Carbon Monoxide gas, then medical attention should be sought at once, as Carbon Monoxide is extremely poisonous, even in small amounts.

If you need further advice or if gas continues to leak.

Call the National Grid on the:

Gas Emergency Freephone Number 0800 111 999.

4.2.3 Oil Leaks

If a member of staff discovers or is informed of an oil leak, then they need to take the following action:

- Turn off all pumps and equipment fed from the tank;
- Report any loss of oil immediately to the Environment Agency on **0800 807060** and follow their advice;
- Report the matter to the heating oil supplier;
- Report the leak to Head Office in order for our insurance company to be informed.

5. Gas and Oil Equipment

It is the Registered Manager's /Head Teachers responsibility to:

- Ensure that a Gas and Oil safety inspection is undertaken at intervals of not more than twelve months, by a Gas Safe engineer (previously Corgi) or OFTEC engineer;
- Keep a record of the appliances checked, the inspection dates and any defects/ remedial action;
- Make this record available and provide a copy to head office.

Every Gas Safe and OFTEC engineer will have a Register ID card with their own unique licence number, showing the type of gas work they are qualified to do. Before any gas work is carried out, always make sure you ask to see their Gas Safe Register ID Card or OFTEC ID Card.

Click here to see Gas Safe Register ID Card.

By law only a competent person can carry out work on gas appliances and oil fired equipment or fittings. Do-it-yourself work on gas appliances or fittings could be dangerous and is likely to be illegal;

It is an offence to use any gas appliance or fittings you know or suspect to be unsafe.

The penalties for breach of this legislation could be considerable leading to heavy fines or even imprisonment in extreme cases.

For additional information:

- **HSE's Gas Safety website;**
- **Gas Safe Register website.**

Revision History

Date last updated: July 2020

Date of next review: July 2021

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End