



SFA Guide to Carbon Monoxide Safety



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Carbon Monoxide is a highly poisonous gas

Carbon Monoxide fumes have no colour, taste or smell and can be produced by appliances that use gas, wood, oil, coal or smokeless fuel.

CARBON MONOXIDE (CO) POISONING



Carbon Monoxide can also be present in smoke from solid fuel, wood or oil appliances. Carbon Monoxide is potentially fatal and even low levels of the poison can cause lasting damage to your health.

Recognising the early symptoms of Carbon Monoxide poisoning will save your life.

The symptoms of Carbon Monoxide poisoning are similar to Flu; Nausea, Dizziness, Tiredness, Headaches, Stomach and Chest pains.



If you experience these symptoms but feel better when you are outside or away from the appliance, you could be suffering from **Carbon Monoxide** poisoning.

Fit an audible Carbon Monoxide alarm

Carbon Monoxide alarms needs to meet the necessary requirements of BS EN 50291-1 and activate within the required time the relevant volume of CO is detected.

Note: an alarm is no substitute for regular maintenance and chimney sweeping.

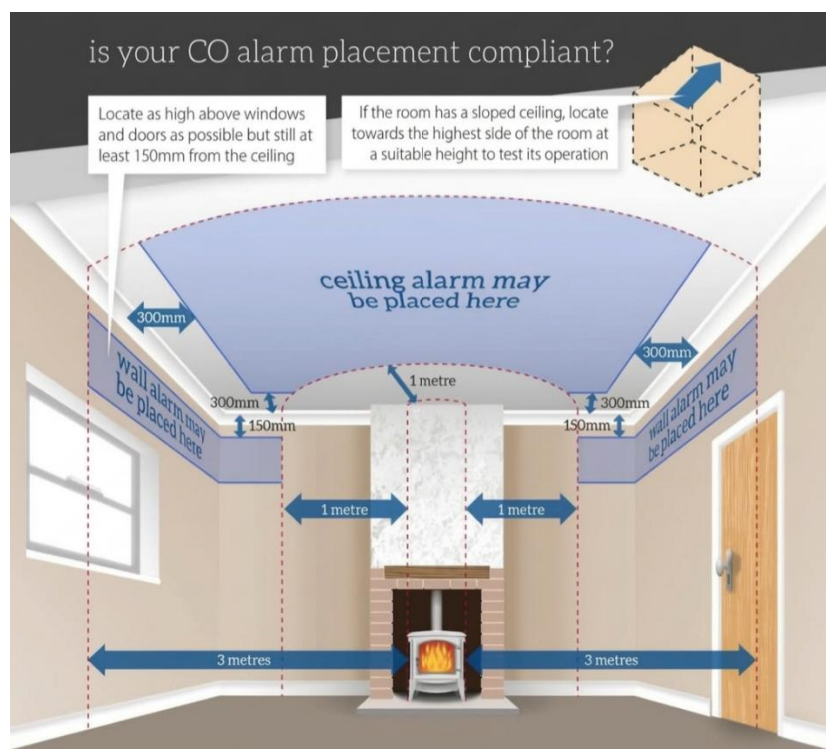
We do not recommend the use of “ Black Spot “ detector as these are often inaccurate and will not alert you if you are overcome by Carbon Monoxide fumes or asleep.

Blocked chimneys can cause deadly fumes to enter the dwelling area, Carbon Monoxide Fumes. For your own protection, it's essential that a carbon monoxide detector should be installed.

The general provisions within Approved Document J and BS8303 ask that the CO alarm be positioned in a location which provides means for the immediate detection of CO upon spillage from a solid fuel appliance. Guidance in Approved Document J and in BS8303 is that CO alarms should be positioned as follows;

A) On the ceiling at least 300mm from any wall or if its located on a wall as high up as possible(above any doors or windows) but not within 150mm of the ceiling; and

B) Between 1m and 3m horizontally from the appliance.



LEGEND

Wall mounted alarm not within 150mm of ceiling

1 meter minimum, horizontal distance from appliance

Ceiling mounted alarm not within 300mm of wall.

3 meter maximum horizontal distance from appliance.

If there is a need to wall mount an alarm above a door or window it must be located as high as possible.

If the alarm is in a room with a sloping ceiling it should be located towards the highest side of the room.

Always locate the alarm in the same room.

These stated parameters allow for the earliest detection of CO as the combustion products disperse and mix with the air within the room. In these positions the detector is also avoiding the relevant “ dead zone “ areas Whereby the velocity of gases disperse and convect in a circular motion and do not reach the corner areas of the room. Its also important to ensure CO alarms are not located directly next to the appliance, or within areas where air disperses at a slower rate. Typically installations of solid fuel appliances are within a builder’s recess, where the flue is contained within a masonry stack which protrudes slightly into the room in which the appliance is installed. Following best practice, it is also recommended for CO alarms not to be located on the side wall of the masonry stack, which again acts as a potential “ dead zone “ which may increase the activation response time of the alarm as the CO disperses into the room in a radiant motion. If you are concerned about the threat of Carbon Monoxide poisoning whilst on holiday in the UK or abroad, you may wish to take a battery-operated Carbon Monoxide alarm with you.

Landlord Requirements

According to HETAS since the 1st October 2022, regulations now require landlords in England to ensure a CO Alarm is fitted in any room containing a solid fuel appliance within rented residential accommodation. This applies to both new and existing installations and failure to follow the new legislation can lead to a civil penalty being imposed on the landlord, whose responsibility it is to ensure compliance. Landlords must take into account the needs of any disabled tenants. Failure to comply can result in a fine.

Scotland & Wales

Wales and Scotland landlords and new builds will have to provide carbon monoxide alarms for all rooms in the home where there is a fuel burning appliance. If a flue passes through a "high-risk" room (e.g., a bedroom or living room), a CO alarm must also be installed in that room. Carbon monoxide alarms must comply with BS EN 50291-1 to ensure they are of safe and reliable quality.

Affixing the Alarm

According to HETAS the regulations currently state “ appropriate provisions shall be made to detect and give warning of the release of CO “. Having checked with the Government Department responsible, we can state that “ appropriate provision “ is seen permanently affixing a suitable alarm to the wall/ceiling is an appropriate place, and that simply leaving an alarm with a customer is not seen as “ appropriate provision “. It is vital for the installer to educate the consumer in the importance of the alarm, its position and what to do when the alarm sounds.

You must have your solid fuel or wood burning appliance safety-checked annually by a registered competent person for solid fuel and wood appliances i.e. HETAS Registered Installer.

You increase the risk of you appliance producing Carbon Monoxide if it is badly installed or poorly maintained.

If you have a solid fuel appliance you should empty the ash pan daily, clean the flue ways at the back boiler weekly and clean the throat plates at the top of the room heater monthly. Have your chimney swept at least once a year if burning smokeless fuel or at least twice a year if using wood or bituminous coal.

A Chimney Sweep should preferably be a member of a recognised association such as:-

The National Association of Chimney Sweeps (NACS)



The Guild of Master Sweeps (GMS)



The Association of Professional Independent Chimney Sweeps (APICS)



All the appliances in your home serve you more reliably and efficiently if they are installed and serviced correctly and your Solid Fuel appliance is no exception. Always use a Competent Person for instance a **HETAS Registered Installer**.



Know how to spot the signs of Carbon Monoxide around your appliance

Look out for Carbon Monoxide danger signs such as sooting or staining around the appliance and excessive condensation in the room.

Carbon Monoxide can also be present in smoke from solid fuel or wood appliances.

Know what to do and who to call in an emergency

If you suspect a Carbon Monoxide leak, stop using the appliance until it has been checked by a competent engineer. You should open all windows to ventilate the area, leave the room to get some fresh air and seek medical advice.

If you seek medical attention, be sure to state that you suspect you could be suffering from Carbon Monoxide Poisoning to ensure you receive appropriate treatment, and are offered a breath or blood test.

It is dangerous to block ventilation

Blocking ventilation or misusing your appliance can lead to **Carbon Monoxide** poisoning. All solid fuel appliances require an adequate supply of air to ensure that the efficient combustion of the fuel occurs and the chimney functions correctly. Failure to provide sufficient air for combustion and ventilation into the room in which the appliance is installed can have very serious consequences. Smoking back will occur and the poor combustion of the fuel will increase levels of soot deposit and **Carbon Monoxide** which is a serious **Health Hazard**.



**VENTILATION.
DO NOT BLOCK**

Appliance installations should always be carried out by a qualified installer. This leaflet is for guidance only and should only be used for reference purposes.

Always buy solid fuel from an Approved Coal Merchant

Our team of specialists are always available to give advice on all aspects of solid fuel heating including installation, maintenance and spare parts. Other guides are available on request.

Phone 01773 835400 for details

www.coalmerchants.co.uk



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