

REQUIREMENT J3: WARNING OF RELEASE OF CARBON MONOXIDE – A CRITICAL ANALYSIS

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Introduction

On 30 April 2018, the government announced that it would be reviewing the legislation of carbon monoxide alarms to see if the legislation was still fit for purpose. The review will consider whether there should be a blanket requirement to install alarms for all methods of heating, including both gas and oil.

A consultation was carried out previously to review the Smoke and Carbon Monoxide Alarm (England) Regulations 2015 which yielded 170 responses; 27% of which indicated that the regulations should be expanded to cover gas appliances. The government did not make any recommendations on the back of this consultation.

On 26 October 2018, the Ministry of Housing, Communities and Local Government published the guidance on the upcoming Carbon Monoxide Alarms Requirements Review: Terms of Reference. The focus of the review will consider the following evidence:

- Improvements to and the falling cost of carbon monoxide alarms
- Any new evidence on the number of carbon monoxide incidents that the emergency services attend
- Any new research that shows whether carbon monoxide poisonings are wrongly diagnosed as something else and so under-reported by statistics
- Any new research on the effects of prolonged low-level carbon monoxide exposure on health.

The aim was to submit the outcome of the review to ministers for consideration in December 2018. Consultation on any proposed changes will likely be in early 2019.

A brief history of carbon monoxide alarms in the Building Regulations

The Building Regulations, in their current form, came into force on 01 October 2010 and have been amended numerous times since then, most recently in 2015. However, there has been no significant change to the requirements for carbon monoxide alarms since the further amendments in 2010.

Carbon monoxide was first introduced to the Building Regulations in the 2002 Edition of Approved Document J, although even then it was mentioned only once under provision 4.2, when recommending that open-flued oil-fired appliances should not be installed in rooms such as bathrooms and bedrooms where there is an increased risk of carbon monoxide poisoning.

In the 2010 Edition, a section titled 'Warning of release of carbon monoxide' was introduced under requirement J2A, which gave guidance on the provision of carbon monoxide alarms where solid fuel appliances are installed. The requirement states:

'Where a fixed combustion appliance is provided, appropriate provision shall be made to detect and give warning of the release of carbon monoxide.'

The limits of this application are that requirement J2A applies only to fixed combustion appliances located in dwellings.

It should be noted that whilst the requirement is non-specific as to the fuel type of the fixed combustion appliance, Section 1: Provisions which applies generally to combustion installations states under provision 1.1 that, in the Secretary of State's view,

requirements J1 to J4 will be met if the building provisions for the safe accommodation of combustion appliances incorporate an appropriate means of warning of the release of carbon monoxide for fixed appliances that burn solid fuels.

A note has been included which states that, for the purposes of requirement J2A, it is considered appropriate to require carbon monoxide alarms only with solid fuel appliances; however, such alarms can still reduce the risk of poisoning from other types of appliance.

The document goes on to provide guidance on the type of alarm, as well as its positioning.

It is worth noting that provision 4.2 from the 2002 Edition of the Regulations still recommends that open-flued oil-fired appliances should not be installed in rooms such as bathrooms and bedrooms.

Further 2010 amendments reflected a regulation number change as a result of re-ordering and so, requirement J2A became requirement J3. There are no other changes regarding carbon monoxide alarms although, interestingly, the note in provision 1.1 still references requirement J2A.

Why do we need warning of the release of carbon monoxide?

Carbon monoxide is a poisonous gas which is odourless, tasteless and colourless. It is produced when fuels such as gas, oil, coal and wood do not burn fully and, for this reason, can be produced by more than only appliances which burn solid fuels.

Carbon monoxide can also be caused by incorrectly installed, poorly maintained or poorly ventilated household appliances. Blocked chimneys and flues can also prevent the gas from escaping the property.

Carbon monoxide is responsible for approximately 50 deaths per year and up to 4,000 hospital visits in England and Wales, according to the Department of Health (2011). Breathing the gas in can result in symptoms similar to flu or food poisoning and can even lead to unconsciousness and death if a person is exposed to high levels or has a prolonged exposure to the gas. Due to its characteristics, it is known as 'the silent killer'. Early warning is vital.

