



Flue-less gas space heaters – safe use guidelines

The purpose of this information is to provide users of flue-less gas space heaters with guidance on their safe use.

What is a flue-less gas space heater?

A flue-less gas space heater is a gas appliance that does not have a flue to collect and exhaust to an outside area, the products of combustion that result from burning gas in the appliance. This type of appliance releases all the combustion products directly into the room it is heating.

What combustion products are produced?

The combustion products produced by flue-less gas heaters include a number of pollutants such as nitrogen dioxide and carbon monoxide, which can be harmful to health. Water vapour is also produced and can directly affect health by increasing the growth of moulds and dust mites. The amounts of air pollutants produced by a flue-less gas heater can vary depending on the size and type of heater, its installation and how well it has been maintained. The level of air pollutants in the room will also vary depending on the way in which the heater is used, the size of the room and the amount of fresh air that enters the room through fixed ventilation openings.

Potential health effects of indoor air pollutants

Flue-less gas heaters are known to increase the level of pollutants inside a home. Recent research has found that at high levels, these pollutants can increase the incidence of symptoms in some people with respiratory sensitivities.

People with asthma are particularly susceptible to increased levels of indoor air pollutants and may experience asthma symptoms more often.

Recommendations for using a flue-less gas space heater

There are several things users can do to avoid or reduce exposure to pollutants from flue-less gas space heaters:

- Keep the room well ventilated. If the room is fitted with a gas bayonet fitting (quick connect device socket) to allow the connection of a flue-less gas heater, then by law two permanent ventilation openings must be installed. The vents must connect to the outside of the building and one vent must be installed at low level and the other vent at high level.
- The physical external dimensions of each vent should be not less than the equivalent of 310mm x 170mm (to provide for a minimum open area of 25,000 square mm based on the vent design having an open area of 48 per cent).
- Never use a flue-less gas space heater in a bedroom, bathroom or in a caravan. (Note: Flue-less gas space heaters are being phased out of use in child care centres and all types of schools, to avoid the lengthy exposure of children to the emissions produced).
- Do not use the gas heater unless it has been certified for use by the Australian Gas Association, SAI Global, IAPMO R&T Oceana, Global Mark or VIPAC (check for label or badge attached), or if the gas consumption of the heater exceeds 25MJ per hour.
- Make sure that air volume of the room in which the heater is used is at least 30 cubic metres (for example: 3.5m x 3.5m with a 2.4m high ceiling).

- Follow the manufacturer’s instructions for the use of the gas space heater. Have each flue-less gas space heater serviced by a qualified person once every two years. A poorly maintained gas heater, together with inadequate ventilation, may contribute to high levels of pollutants.

Further information

Further information on this subject may be obtained from relevant gas appliance manufacturers or their local representatives.

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