



Information on your new home weather sealing

In the case where you have a Gas Space Heater, we are required to provide you information on the following:

– the importance of ensuring adequate ventilation when using their gas heater to ensure its safe use as highlighted in Energy Safe Victoria's [Be Sure campaign](https://esv.vic.gov.au/campaigns/carbon-monoxide/) (<https://esv.vic.gov.au/campaigns/carbon-monoxide/>) and [Heating your home safely with gas information page](https://esv.vic.gov.au/safety-education/gas-safety-at-home/heating-your-home-with-gas/flues-and-ventilation/) (<https://esv.vic.gov.au/safety-education/gas-safety-at-home/heating-your-home-with-gas/flues-and-ventilation/>)

– the advice by [Victorian Building Authority](https://www.vba.vic.gov.au/consumers/guides/carbon-monoxide/) (<https://www.vba.vic.gov.au/consumers/guides/carbon-monoxide/>) and [Sustainability Victoria](https://www.sustainability.vic.gov.au/energy-efficiency-and-reducing-emissions/building-or-renovating/key-principles-of-energy-efficient-design/planning-and-design/insulation/draught-proofing/) (<https://www.sustainability.vic.gov.au/energy-efficiency-and-reducing-emissions/building-or-renovating/key-principles-of-energy-efficient-design/planning-and-design/insulation/draught-proofing/>) that a licensed gasfitter should be engaged to check the safe operation of the appliances as part of weather sealing upgrades

Guidance on the difference between a flueless/unflued gas heater and a room sealed gas heater

Flues and ventilation

What is a flue?

Adequate ventilation and proper flueing are essential for the safe and efficient operation of gas appliances.

Flues work on the principle that hot air is lighter than the surrounding air, so a flue allows the combustion products out into the open atmosphere, rather than spill out of the draught diverter and into the room.

Gas space heaters are classified based on how this flueing is achieved. There are three categories for gas space heaters:

- Flueless (Information must be provided to consumer)
- open-flued (Information must be provided to consumer), and
- room sealed.

What is a flueless (or unflued) heater?

Flueless heaters draw combustion air from within the room and emit combustion products back into the same space where the heater is located.

These heaters require ongoing ventilation to external spaces to allow fresh air to fuel the burner and discharge combustion products.

Indoor flueless heaters are restricted in Victoria. Regulations prohibit the installation of new indoor flueless heaters, with the exception that existing LPG flueless heaters may be replaced in limited circumstances.

Gas heaters intended for outdoor use only have different requirements. Heaters designed for outdoor use must never be brought indoors, or in an unventilated location like a caravan or tent.

What is room sealed heater?

Room sealed heaters, as the name implies, have a combustion circuit that is completely sealed from the living area. All air drawn in for combustion and all products of combustion emitted, are flued outside the room via separate ducts.

This means ventilation is not required for the living room and room exhaust fans do not affect the safety of the heater. These appliances have a very low risk of adverse combustion products entering the home.

What is an open-flued heater?

Open-flued heaters draw air from the room to feed the fire and direct combustion products outside via a flue. Inadequate ventilation and use of exhaust fans can draw carbon monoxide (and other exhaust gases) back into the room in certain circumstances.

Their design means the combustion circuit is exposed to air pressure from within the room at the burner inlet, and at the flue terminal outside. Consequently, factors such as wind or the use of appliances including bathroom exhaust fans can lower the air pressure inside the room, creating a negative pressure environment.

If the negative pressure is high enough, airflow through the flue may become restricted or in some cases even reversed. If the supply of fresh air to the burner is interrupted, the flame will produce high levels of carbon monoxide.

To ensure the burner is not affected by changes in the flue, many natural draught open-flued heaters are fitted with a draught diverter. The draught diverter is an opening in the flue that allows combustion products to spill into the living area in the event the flue is blocked or there is a negative indoor pressure. When the flue is operating correctly, the hot combustion products travelling up the flue will suck combustion products straight past the draught diverter opening to outside.

However, when there is a fault the draught diverter is designed to automatically redirect combustion products into the living area without interrupting airflow to the burner and without producing excessive carbon monoxide. Therefore, the room in which the heater is installed requires ventilation to provide replacement air used by the heater, and prevent negative pressures from exhaust fans from affecting the normal operation of the heater.

Gasfitters are required to test heaters during installation and servicing to ensure they do not spill combustion products and any exhaust fans do not affect the heater.

To identify whether your gas heater is open-flued, you must contact the manufacturer or a qualified gasfitter.