Gas pool and spa heater safety

Gas fired water heaters need ventilation to operate safely.

Gas water heaters designed for external use can be fatal if they are installed in enclosed spaces without adequate ventilation.

Gas needs fresh air to burn cleanly and to get rid of dangerous exhaust fumes and surplus heat. Without sufficient ventilation, gas heaters can produce dangerous amounts of carbon monoxide.

WARNING – Carbon monoxide can overcome people without warning and cause death.

Never enclose gas pool and spa heaters designed for external use without providing adequate ventilation. Carbon monoxide can be formed and travel into adjoining rooms.

Property managers – what to do

Gas pool and spa heaters can be found in residential strata schemes, caravan parks, hotels, motels, fitness centres, retirement villages and holiday parks.

If you manage a property with a gas pool or spa heater, you need to be aware of the safety risks and take steps to ensure that the heating appliance is operating safely.

Make sure you comply with the safety checklist below and that your gas heaters are serviced once a year by a licensed gas fitter.

If you have concerns about the safety of a water heater on your property, you should close down the gas heater immediately and contact a licensed gas fitter to arrange an inspection.

Builders and gas fitters – what to do

Builders and gas fitters must be aware of the safety requirements for the installation of gas heaters for external use. These are easily identified as they are not fitted with a flue. Unflued water heaters must always be located outside and remain outside following any building extensions. Never enclose gas pool and spa heaters designed for outdoor use.

When builders modify, extend or enclose a building, garage, balcony or basement, always check for gas fired appliances. Inspect the roofline for the emergence of a flue or chimney which could indicate the position of a flued gas water heater below. Although provided with a flue, these appliances need air.



Never enclose gas pool or spa heaters designed for external use.

Safety checklist: Gas pool and spa heaters

Follow these safety steps:

- never enclose gas pool and spa heaters designed for outdoor use
- never allow a ventilation source to a flued appliance to be closed, eg. by a roller door



- never allow exhaust fans or ducts to cause back draught to the gas appliance
- always ensure that flues terminate outside away from windows
- always clear dust and debris from inside the appliance and flue after construction
- always ensure there is ventilation at both high and low positions for fresh air circulation.

It is recommended that all gas pool and spa heaters are serviced once a year by a licensed gas fitter.

Danger signals

Carbon monoxide on its own is odourless. However, in the majority of cases when carbon monoxide is formed, other partially oxidised gases are also produced. These other gases produce an acrid or pungent smell.

Some people have likened the odour to the smell of the fumes emitted by a forklift truck or taxi. If you notice an acrid or pungent smell around a gas appliance, there is a good chance that it is also producing high levels of carbon monoxide.

If you have concerns about the safety of a water heater, you should close it down immediately and contact a licensed gas fitter to arrange an inspection.

Need more information?

Property managers should contact a licensed gas fitter for enquiries about their gas pool and spa heaters.

Builders and gas fitters should refer to AS5601 - 2004 for more information – see Section 5 *Installing appliances*.

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