

EnergySafety

Safe locations for using gas barbecues



Department of Consumer
and Employment Protection
Government of Western Australia
EnergySafety

Safe locations for using gas barbecues

This brochure is designed to advise builders, gas fitters and consumers where gas-fired barbecues may be installed and used. The information does not take precedence over the Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999 or manufacturers' instructions.

Types of gas barbecues

There are three types of gas-fired barbecues.

1 Domestic indoor barbecues

Domestic indoor gas barbecues are designed, manufactured and certified for **domestic indoor use only**. They must be installed and used strictly in accordance with the manufacturer's instructions.



2 Domestic outdoor barbecues

Domestic outdoor gas barbecues are designed, manufactured and certified for outdoor use only. They are not subject to the stringent testing for emissions that is applied to domestic indoor appliances, as they are only to be used outdoors in a well-ventilated area.



3 Commercial barbecues

Commercial gas barbecues are designed, manufactured and certified to standards different to those for domestic barbecues. Commercial barbecues are intended for commercial use only, such as in restaurants, hotels and fast food outlets. They are installed under canopies that extract and filter fats, greases and odours.

The Australian Gas Association's online product directory at www.gas.asn.au and the SAI Global product website at www.sai-global.com have listings of certified gas appliances.

Note: It is EnergySafety policy not to allow gas barbecues certified for outdoor use to be modified for use indoors.

Ventilation requirements

Gas barbecues need adequate ventilation to ensure that there is sufficient air for combustion (for gas to burn safely) and to dilute the products of combustion to safe levels.

Where barbecues are used in an outdoor area, there is usually adequate natural ventilation. However, there may be some 'semi-outdoor' situations where

there is inadequate ventilation and the use of barbecues in these areas is therefore not recommended.

Indoor barbecues are required to have adequate mechanical ventilation.

What is an outdoor area?

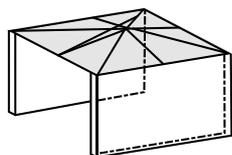
An outdoor area is an open-air situation that is not obstructed by buildings, structures etc, facilitating correct combustion and allowing products of combustion to be readily dispersed to atmosphere.

An alfresco area, veranda or balcony (large area) is considered outdoors when it is an open-air situation with natural ventilation. This ensures stagnant areas do not form, as these prevent the products of combustion from being rapidly dispersed by wind and natural convection.

In the unlikely event of a gas leak occurring, a well-ventilated area will allow escaping gases to rapidly disperse.

The following situations are considered to provide the natural ventilation required for an outdoor domestic barbecue to be used:

- Four open sides with a roof or overhead cover.
- Four enclosed sides (walls) without a roof or overhead cover.
- Two parallel walls or two walls at right angles to each other with a roof or overhead cover.

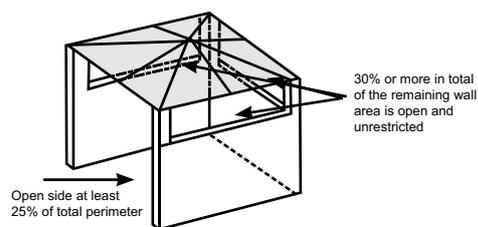


Parallel walls



Right angle walls

- Three walls, with the one open side being at least 25 per cent of the total perimeter and the remaining three walls having an area of 30 per cent or more of unrestricted opening, with a roof or overhead cover.



In such installations, the barbecue may be connected by a flexible hose to a natural gas bayonet point (or similar fitting), through fixed connections to gas piping or by connection to an LP Gas cylinder.

Barbecues on balconies or verandas

A gas barbecue may be installed and used on a balcony or veranda if, by location and use, it will not cause a hazard and if the manufacturer's instructions allow for such use. Some barbecues are designed specifically for these situations where space is restricted.

It may also be necessary to consult local building laws before installing or using a gas barbecue on a balcony or veranda.

A balcony or veranda shallow in depth and with a roof and three enclosed sides is considered an acceptable area if the following applies:

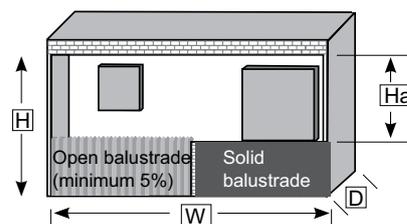
- the depth of the balcony or veranda is smaller than or equal to its height; and
- the open face width is at least twice the depth.

Examples of these situations:

- A balcony with an open construction balustrade (more than 75 per cent free open area). Measure the distance from floor to roof 'H'.

The maximum allowable depth 'D' is the same as 'H' and the minimum width 'W' is twice 'D'.

- A balustrade is enclosed or has less than 75 per cent free open area. Measure from the top of the balustrade to the roof 'Ha'. The maximum allowable depth 'D' is the same as 'Ha' and the minimum width 'W' is twice 'D'.



It is recommended that access doors or windows to the balcony or veranda be closed while the barbecue is in use.

Other requirements for gas barbecues

Other requirements for gas barbecues installed indoors or outdoors are:

- Clearances between the gas barbecue and the building must meet the barbecue manufacturers' installation instructions and the regulatory requirements of the Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999.
- A minimum clearance of:
 - 1,200 mm for domestic barbecues; or
 - 1,350 mm for commercial barbecues

is to be maintained between the barbecue cooking surface and the ceiling, roof or overhead cover to avoid the risk of combustion occurring on surfaces laden with grease deposits.

There is a requirement under 'Minor Storage' in AS 1596 that limits the LP Gas cylinder or cylinders that can be used or stored on a balcony to 4.5 kg.



A commercial gas barbecue may be permitted indoors in a residence (an indoor domestic situation) provided the following requirements are met:

- a mechanical ventilation system complying with Local Government requirements (AS 1668.2 'Ventilation design for indoor air contaminant control') is installed;
- the installation meets commercial catering equipment requirements, including clearances and protection of combustible surfaces, as specified in AS 5601 'Gas installations'; and
- the gas supply piping to the barbecue is permanently connected and fitted with a clearly identified manual isolating valve located in a safe, accessible position remote from the barbecue.

Note: Before installing a commercial gas barbecue inside a domestic residence, it is recommended that advice on the installation be obtained from the relevant gas supplier.



A commercial gas barbecue with mechanical ventilation.



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Level 1, 303 Sevenoaks Street (Cnr Grose Ave)
Cannington WA 6107

Telephone: (08) 9422 5200 Facsimile: (08) 9422 5244
National Relay Service: 13 36 77

Mailing address: PO Box 135 Cannington WA 6987

Website: www.energysafety.wa.gov.au
Email: energysafety@docep.wa.gov.au

Regional offices

Goldfields/Esperance	(08) 9021 5966
Great Southern	(08) 9842 8366
Kimberley	(08) 9169 2811
Mid-West	(08) 9964 5644
North-West	(08) 9185 0900
South-West	(08) 9722 2888

If you require the services of an interpreter, contact the Translating and Interpreting Services (TIS) on 131 450 and ask for connection to EnergySafety on 9422 5200.

This publication is available on request in other formats to assist people with special needs.

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