

# Gas Information Sheet 45

## Performance-based design applications

### Overview

This gas information sheet provides information about submitting an acceptable, performance-based design application when a proposed complex gas installation will vary from the Australian Standard AS/NZS 5601 'means of conformance' requirements.

Gas installations can be designed to meet 'performance-based' requirements rather than the 'means of conformance' requirements (found in sections 3 to 6 of Part 1, and sections 3 to 9 of Part 2) under AS/NZS 5601:

- Part 1: General installations - Section 2 Essential safety and performance-based design requirements
- Part 2: LP Gas installations in caravans and boats for non-propulsive purposes - Section 2 Essential safety and performance-based design requirements.

When adopting a performance-based design approach:

- you must consult Energy Safe Victoria and submit a performance-based design application before commencing work
- the level of safety, convenience, and efficiency of the design's operation must at least match an installation that meets the 'Means of conformance' requirements.

Performance-based design applications only apply to complex gas installations that cannot meet the compliance requirements of AS/NZS 5601. Type B gas appliance installations that cannot meet the requirements of AS 3814 Industrial and commercial gas-fired appliances, require an application for exemption in accordance with Schedule 6 of the Gas Safety (Gas Installation) Regulations 2018. For further information on applying for an exemption please see Gas Information Sheet 64:

[home](#) > [industry guidance](#) > [gas and pipelines](#) > [gas information sheets](#) > [GIS 64](#)

<https://www.energysafe.vic.gov.au/industry-guidance/gas/gas-information-sheets/gis-64-schedule-6-applying-exemption>

### Submitting an acceptable, performance-based design application

An acceptable performance-based design application requires the applicant to:

- create and submit a gas application using Energy Safe's online system (GasTrac)
- make a note within the scope of works that you are using a performance-based design for all or part of the works associated with the gas application (and be specific about which parts)
- submit substantiating documentation from both the applicant and a 'competent person' to verify that the design meets the required performance requirements
- provide a detailed description of the performance requirements the alternative solution is required to meet (from AS/NZS 5601 Section 2)
- clearly identify:
  - which 'Means of conformance' requirements the design relates to (specific clauses from sections 3 to 6 of Part 1, or sections 3 to 9 of Part 2)
  - the specific part of the gas installation (scope of work) the design relates to. (For example, 'ventilation of the home economics room in building B1 room 4'.)

## Documentation to support the application

Supporting documentation will only be accepted if it is supplied and signed off by a 'competent person' and may include but is not limited to<sup>[1]</sup>:

- National Association of Testing Authorities (NATA) accredited test reports
- expert judgements or evidence that is being relied upon to support the alternative solution.

A competent person is defined as a person (or body) who (through training, qualification, or practical experience, and an understanding of the equipment and processes) is able to verify compliance with the standard.

Additional information the 'competent person' must provide to support the application includes (but is not limited to):

- the site's full address
- evidence that the design meets the minimum essential safety requirements of AS/NZS 5601
- the design's schematic diagrams, which may include wiring diagrams or pipe design diagrams
- details of the materials to be used.

<sup>[1]</sup> All documentation must be kept for seven years.

## Who we are

At Energy Safe Victoria we work to keep Victoria energy safe.

We regulate the energy industry and sector to ensure generation, supply and usage uphold safety standards, and engage with the community to raise awareness of energy safety risks.

In everything we do, we strive to deliver on our purpose to keep Victoria energy safe. Always.

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