

Gas Information Sheet 45

Performance-based design applications



Introduction

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 5601 'means of compliance/conformance' requirements.

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

- Part 1, General Installations, Section 2, Performance-Based Design and Other Essential 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 (ESV) 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 'deemed-to-satisfy' requirements.

Performance-based design applications only apply to complex gas installations that cannot meet the compliance requirements of AS 5601. Type B gas appliance installations that cannot meet the requirements of AS 3814, Industrial and Commercial Gas-fired Appliances, require a Schedule 6, Gas Safety (Gas Installation) Regulations 2008, Application for 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 ESV'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 5601, Section 2)
- clearly identify:
 - which 'means of compliance/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 to¹:

- National Association of Testing Authorities (NATA) accredited test reports
- expert judgments 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 requirements of AS 5601
- the design's schematic diagrams, which may include wiring diagrams or pipe design diagrams
- details of the materials to be used.

Further information

Contact ESV's Technical Information Line on 1800 652 563, or email gastechnicalenquiry@energysafe.vic.gov.au.

¹ All documentation must be kept for seven years.

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