

Gas Information Sheet 30

Location of appliance isolating valves and consumer piping regulators



Overview

The purpose of this Information Sheet is to provide, for industrial and commercial installations, a consistent approach to:

- (a) the location of appliance isolation valves and consumer piping regulators; and
- (b) the relevant requirements of AS/NZS 5601.1 and AS 3814.

“Accessible” is defined in both standards as follows:

Access can be gained without hazard or undue difficulty for inspection, repair, testing, renewal, or operational purposes.

Location of appliance isolation valves

AS 3814, Clause 2.9.8.3, states:

The appliance isolation valve shall be:

- 1) located upstream of
 - a. all other controls and
 - b. the start gas line
- 2) in close proximity to the appliance and
- 3) accessible to enable quick isolation of the gas supply.

Location of consumer piping regulators

AS/NZS 5601.1 Clause 5.11.1.2, states:

A consumer piping gas pressure regulator shall be installed in accordance with all of the following ...

- 4) accessible for maintenance and adjustment.

In each of the above clauses the word “accessible” is used and is a requirement in order for the installation to be compliant with the standards.

Consumer piping regulators need to be accessible for the following reasons:

- Repairs and replacement.
Note: Regulators have a finite life and must be replaced at intervals as per the manufacturer’s specifications.
- Maintenance of filter elements (if fitted).
- Periodic testing to ensure the regulator is functional and operating at the required pressure.
- Checking the Over Pressure Shut Off (OPSO) function (if fitted).
- Resetting of the OPSO function if it trips.

Note: Consideration needs to be taken when installing a regulator with an OPSO in a location where an elevated work platform is required to be hired in order to reset it. This is not cost-effective as the cost of lost production may exceed the cost of locating the regulator in a more appropriate location.

Access requirements

Permanent fixed means of access should be installed where the regulator is located on a roof or at a height beyond the extent of normal steps or ladder. Fixed access is to comply with AS 1657-2013 Fixed platforms, walkways, stairways and ladders – Design construction and installation.

Locations greater than 2m above ground level will require observance of the Occupational Health & Safety Regulations 2017.

An alternative means of safe access acceptable to Energy Safe Victoria may be provided by the property owner or his representative by agreement.

Note: 'Alternative' means of access may include elevated work platforms, scissor and boom lifts.

Appliance isolation valves

The appliance isolation valve is generally additional to the burner isolation valve located adjacent to the burner and intended for commissioning and servicing.

The location of an emergency valve for a steam boiler or hot water installation, as required by AS/NZS 5601.1 Clause 5.2.10, is based on the intent to limit the exposure of personnel to a possible steam hazard, i.e. leaking steam or steam-side explosion.

An appliance isolation valve needs be accessible for the following reasons:

- In the case of a fire or other incident the valve can be located without having to gain access to it on top of an appliance posing a risk to plant and personnel.
- Isolation at the meter is not always practical and vital time may be lost in gaining access to the meter.
- The appliance may have multiple burners and it may not be practical to isolate each burner in an emergency or for servicing.

Means of isolation

All commercial/industrial installations require a means of isolation provided on the inlet connection of an appliance.

Gas appliance isolation valves in elevated locations

In many instances burners are located on top of an appliance. This may be for a number of reasons, such as the location of oven re-circulation fan and combustion chamber for compactness or floor space limitations. Spray and bake booths are a common example.

Locating a gas appliance isolation valve on the top of an appliance does not enable the quick isolation of the gas supply as required by AS 3814 clause 2.9.8.3. In order to achieve compliance the gas appliance isolation valve will be required to be brought down to low level adjacent to the appliance and be clearly identified.

If further information is required, please phone the Gas Safety Technical Information Line on 1800 652 563.

Appliance type	Requirement for isolation	
	Type of premises	
	Single residential	Commercial/industrial or residential apartment buildings
Water heaters including pool heaters	Yes	Yes
Ducted heaters	Yes	Yes
Others not listed	Yes	Yes
Cooking appliances	Optional	Yes
Space heaters	Optional	Yes
Gas lights	Optional	Yes

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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