

Gas Information Sheet No. 30

Location of appliance isolating valves and consumer piping regulators

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 5601.1:2013 and AS 3814-2015.

"Accessible" is defined in both standards as follows:

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

Location of appliance isolation valves

AS 3814-2015, Clause 2.9.7.3, states:

The appliance isolation valve shall be:

- a) *located upstream of*
 - i. *all other controls and*
 - ii. *the start gas line;*
- b) *in close proximity to the appliance and;*
- c) *accessible to enable quick isolation of the gas supply.*

Location of consumer piping regulators

AS/NZS 5601.1:2013, Clause 5.11.1.2, states:

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

- d) *Readily 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 be readily accessible for the following reasons:

Energy Safe Victoria
ABN 27 462 247 657

Level 5 Building 2
4 Riverside Quay
Southbank VIC 3006

PO Box 262
Collins St West VIC 8007
DX 212569 Melbourne VIC

T (03) 9203 9700
F (03) 9686 2197
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- 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).
- Regular 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: Installing a regulator with OPSO in a location where the owner or operator needs to hire a cherry picker to reset it is not cost-effective if the cost of lost production will exceed the cost of locating the regulator in at a more appropriate location.

Access requirements

Access to a regulator located on a roof must be by fixed ladder complying with AS 1657-2013 Fixed platforms, walkways, stairways and ladders – Design construction and installation.

Locations greater than 2 m above ground level will require observance of the Occupational Health & Safety (Prevention of Falls) Regulations 2003.

Where the company refuses to have fixed access and elects to use a fork lift then the fork lift platform must comply with WorkSafe Victoria guidelines.

Appliance isolation valves

The appliance isolation valve, while it is not termed an emergency isolation valve, serves that function. Appliance isolation valves should be clearly identified as such.

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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 5601.1:2013, Clause 5.2.12, 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 readily accessible for the following reasons:

- In the case of a fire or other incident.
- The appliance may have multiple burners and it may not be practical to isolate each burner in an emergency or for servicing.

Notes:

1. Accessing the meter valve may be time consuming and is not always practical in an emergency.
2. For valves located adjacent to a high level appliance, the use of chains and or levers fitted to the valve may be acceptable if fixed means of access is not practical. Clear labeling indicating the purpose is to be provided.

Means of isolation

A means of isolation shall be provided on the inlet connection of an appliance, in accordance with the table below. Refer to AS/NZS 5601.1:2013 Clause 6.6.3 for more information regarding a means of isolation.

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 recirculation fan and combustion chamber for compactness or floor space limitations. Spray and bake booths are a common example.

Locating a valve on the top of an appliance is unacceptable.

Protection from falls over the edge of the appliance is required by OH&S legislation.

Direct fired heaters are often located on roofs, in suspended ceilings or at high level.

Where it is not practical to provide fixed access then the owner must make provisions for temporary access. This can be a scissor lift or cherry picker or a cage fitted to a fork lift acceptable to VWA requirements.

Appliances or components cannot be serviced safely from a ladder of any height. Where practical a permanent platform should be provided.

If there is any doubt over the means of access to appliance components or consumer piping components then VWA guidelines or the appropriate Australian Standards should be consulted.

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