Manual shut-off valves for multiple occupancy buildings and high rise buildings

A multiple occupancy building can be described as having one or more storeys and with two or more occupancies within the same building. A high rise building is a multiple occupancy building of five or more storeys.

For reasons of safety, to facilitate maintenance or for resupply after gas supply is interrupted within the multiple occupancy building, a manual shut-off valve able to isolate the supply of gas to each occupancy is required by AS/NZS 5601.1:2013.

The manual shut-off valve for each occupancy is required to be located in an accessible and identified location.

Gas supply isolation for multiple occupancies

In multiple occupancies, within the same building, consumer piping to each apartment shall include a quarter turn manual shut-off valve. This valve shall be accessible and external to the apartment (if practicable) and be identified by a durable, permanent sign located in a prominent position adjacent to the valve. If the isolation valve is remote to the apartment then the sign shall identify which occupancy the valve serves. Refer to AS/NZS 5601.1:2013 Clause 5.2.9.

Gas supply isolation for multiple occupancies in high-rise buildings

A clearly identified manual shut-off valve shall be installed in an accessible location at the gas entry point (base) to each riser where there is more than one riser, in each lateral branch pipe as close as practicable and accessible to the main riser and for each occupancy unless the valve in the lateral branch pipe already serves that purpose (i.e. a single occupancy on one storey). A pressure test point is recommended to be installed downstream of each valve. Refer to AS/NZS 5601.1:2013 clause 5.7.4.

Concealed piping

Unlike the roof space of a house, where gas can escape to atmosphere if a leak occurs, unvented ceilings of foyers, kitchens, food courts and corridor ceilings could form a very large area to hold any leaking gas.

Where consumer piping, including the manual shut-off valve, is located in a concealed location then ventilation is required unless all connections including the manual shut-off valve are connected with permanent joints. Refer to AS/NZS 5601.1:2013 Table 5.2 Piping in concealed location for details of ventilation requirements.

Where consumer piping is to be installed in a void, duct or sleeve and the conditions in AS/NZS 5601.1:2013 Clause 5.3.8 indicate ventilation is required then all of the following shall apply:

a) Ventilation openings shall be provided at each end of the area.

b) Ventilation openings shall be in a safe location.

c) Ventilation openings shall have a free ventilation area that complies with AS/NZS 5601.1:2013 Table 5.3 Ventilation for concealed piping.
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Application of this requirement in Victoria

To enable industry to transition to the new compliance requirements relating to occupancy manual shut-off valves, Energy Safe Victoria are applying the following approach for the compliance requirements of AS/NZS 5601.1:2013 clauses 5.2.9 and 5.7.4.

- Where approval for construction (i.e. the date the Building Permit was issued) of the gas installation occurred before the adoption of AS/NZS 5601.1:2013 in Victoria (31 March 2014), AS5601-2004 will be the standard used to measure compliance for occupancy manual shut-off valves.

- Current works, for which approval for construction had been granted after the adoption date of AS/NZS 5601.1: 2013, will be required to comply with clauses 5.2.9 and 5.7.4. If it is believed by the Applicant that compliance on these existing jobs cannot be achieved, then a Schedule 6 Exemption (Gas Safety (Gas Installation) Regulations 2008) may be applied for. The Exemption application must clearly state the reasons why compliance is not warranted (considering both safety and cost), and state how an acceptable level of safety will be achieved.

- Future works (with approval for construction dated after 1st July 2015) will need to comply with the requirements of AS/NZS 5601.1:2013 for occupancy manual shut-off valves.

For more information contact the Technical Helpline on 1800 652 563.