

ENVIRONMENTAL LAND SERVICES (AUSTRALIA) PTY LTD

GAS METER INSTALLATION GUIDE

A Guide to Builders & Installers

10/4/2019



Guidelines for ELS Domestic Meter Installations

ELS (Australia) Pty. Ltd. has a Distribution License to reticulate LPG vapour underground within new housing estates at Mt Barker SA.

This Guide document provides information and ELS' requirements to be followed for installing gas meter boxes and services for safe, reliable and efficient connection to ELS' LPG gas network.

The Australian Standard (Code) that covers the installation of domestic gas Services and Customer Meter Sets is AS/NZS 4651.1 and domestic meter installations that comply with ELS' requirements as outlined in this Guide will generally meet or exceed the requirements of that Code.

Gas Service Installations and Gas Meter Box Locations

This section sets out ELS' standard requirements for the laying of gas services and the location of gas meter boxes.

The route of the underground service between the gas meter box and the gas connection point is to be evaluated, to ensure:

- the route is free from hazards / obstructions,
- is as close as practicable to the street frontage,
- is straight and
- there is a minimum separation of 250 mm from all other underground services

Gas meter boxes must be installed in a location not greater than 1,000mm behind the Building Frontage of a dwelling.

Note: The Building Frontage is defined as the elevation of the building that faces the relevant gas main or service which connects to the property.

Ease of the installation of the gas service and possible later access to the gas service and the meter box must be taken into consideration when planning its route including adequate separation from the boundary fences and walls.



Gas Meter Box Location Restrictions (per AS/NZS 4645)

The gas meter shall <u>not</u> be installed in any of the following locations/situations – as adapted from the clauses in AS/NZS 4645.1:2008 (Appendix K) relevant to typical ELS installations:

- Closer than 1000mm from a source of ignition including electrical devices such as the external unit of a split system air conditioner, pool pumps, external power points, etc.
- Where egress from a building would be obstructed.
- In a cavity wall, unless installed in an ELS approved ventilated enclosure which is sealed from the cavity.
- Where access for meter reading or maintenance is restricted.
- In an unventilated position.
- Where subject to physical damage unless the gas meter is adequately protected.

The definition of adequate protection shall be determined by ELS in all instances.

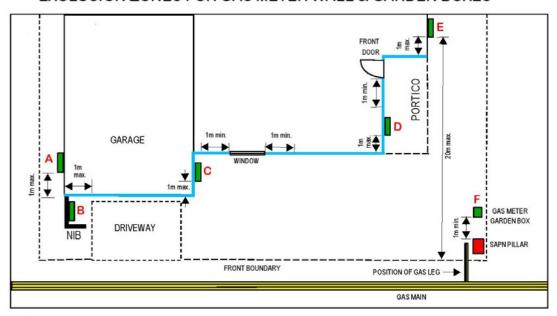
- On a fence, unless the fence is constructed of masonry.
- In a carport or any other location where it may be struck by vehicular traffic.

If the gas meter or box is not situated in a protective recess and there is likelihood of vehicular damage (e.g., adjacent to a driveway), then the gas meter box must be protected by bollards or ELS approved alternative methods.

- Where there is an obstruction to installing the gas service, maintaining or reading the gas meter or accessing the gas meter box in an emergency.
- In a position where any part of the gas service to supply the gas meter box has to pass under any part of a building (i.e., carport, garage, etc.).
- Behind fencing or a locked gate, unless the gas meter remains readily accessible at all times.
- In a position that contravenes the requirements of other utility service providers.



EXCLUSION ZONES FOR GAS METER WALL & GARDEN BOXES



- A YES
- B YES recommended position (nib wall).
- C YES
- D YES access conduit must be installed in strip footing @ 450mm deep & 250mm from other services.
- E YES must be approved by ELS.
- F YES garden box must be approved by ELS.





Meter Box Installation Locations/ Separations & Dimensional Requirements

Only ELS approved gas meter boxes shall be used and ELS approved mounting and location requirements must be met.

The diagrams at the end of this guide are provided for clarity.

A gas meter box must satisfy the location requirements set out below:

Bottom of Meter Box to top of concrete slab (4 x bricks above concrete slab) – no less than 350 mm and no greater than 500 mm

Front Edge of Meter Box to Building Frontage – meter boxes must be installed in a location not greater than 1,000 mm behind the Building Frontage of a dwelling.

Gas meter boxes must have a minimum clearance of 1000 mm from any door, opening window, mechanical air inlet (including air conditioners) or any other opening into a building.

Note: An air brick / vent and ventilation gaps in brickwork are considered an opening to a building, if lower than the meter box and within the 1000 mm radius exclusion zone and any such openings must be sealed.

Separation distances measured will include around corners.

Windows within the 1000 mm exclusion zone must be permanently fixed so they cannot open. Permissible compliance methods are as follows:

- Reversing the openable portion of the window
- Permanently securing the window in the closed position with a minimum of two (2) rivets or non-retractable screws in three (3) sides of the openable window portion. There must be a minimum quantity of six (6) permanent fixtures.

Note: Approval must be granted by ELS before proceeding with any gas meter positions within 1000 mm of altered building windows or openings. Approval of acceptable window fixing is at the discretion of ELS.

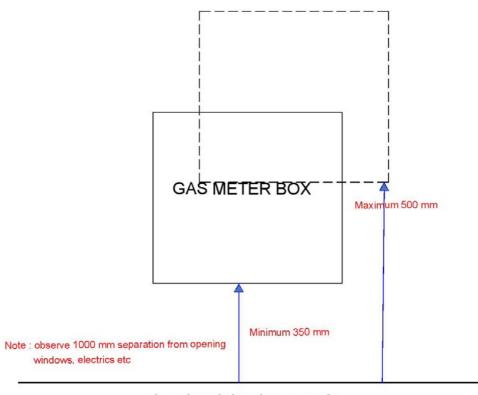
A 1000 mm exclusion zone applies between the SAPN electrical power dome and any part of the gas service including the service riser and the gas meter box.

A 1000 mm exclusion zone applies between any source of ignition (e.g. external power point, air conditioner) and any part of the gas service including the service riser and the gas meter box.

A 100 mm exclusion zone applies between an electrical earth stake and any part of the gas service including the service riser and the gas meter box.



GAS METER BOX MOUNTING



TOP OF CONCRETE SLAB



