Changing Cylinders

It is desirable that cylinders are changed and connected by the local LPG dealer/distributor. When changing the cylinders it is important that the date on the hose be checked to ensure that it has not exceeded its recommended life (5 years).

Before connecting replacement cylinders, the hoses should be checked for cracks and evidence of wear and it should be established that sealing washers on the hose end fittings are in place and in good condition.

Cylinders should only be delivered if they can be immediately connected to the system; spare cylinders should not be left at a premises. An exception is the case of installations at certain non-domestic premises where any spare cylinder should be stored at a separate location in accordance with I.S. 3213. The use of a changeover device generally eliminates the need to store spare cylinders.

In the event of the gas supply running out or being otherwise interrupted the on/off taps of all gas appliances should be turned off before the main gas supply is restored. After the restoration of the gas supply all pilots should be relit.

IF YOU SMELL GAS

- Turn the gas off at the cylinder(s).
- Turn off all naked flames and eliminate all sources of ignition BUT do not turn electrical switches on or off.
- If leak is indoors, open all windows and doors to disperse gas. If cylinder is indoors, disconnect it and move it outdoors to an open area.
- If the leak cannot be stopped or a significant leak has occurred, evacuate the premises.
- Contact your installer or gas supplier. In the event of fire, contact the emergency services.

Notes and Limitations

This leaflet is not a legal interpretation of, Irish Standards IS 813 and IS 820 (see below), to which reference MUST be made for further guidance.

This leaflet does not cover the use of cylinders indoors, for which reference should be made to IS 813 in the case of domestic installations and IS 820 for non-domestic installations. In the cases of cylinders on rooftops, and cylinders in purpose-designed recesses, please refer to IS 820. These standards also cover details on other issues, such as pipework, appliances, ventilation, flueing, etc.

Advice may also be obtainable from your gas supplier or from the Health and Safety Authority at 10 Hogan Place, Dublin 2 (phone 01 6147000).

References

I.S. 820, Non-Domestic Gas InstallationsI.S. 813, Domestic Gas InstallationsI.S. 3213:1987 Code of practice for the storage ofLPG Cylinders and Cartridges

Above available from the NSAI, Ballymun Road, Glasnevin, Dublin 9.

Installations with a storage capacity in excess of 70 kg of LPG are subject to the requirements of the Dangerous Substances (Storage of Liquefied Petroleum Gas) Regulations, S.I. 201 of 1990.

Statistical content of the stallation and Maintenance of Propane Cylinders at Fixed Domestic and Non-Domestic Installations



IRISH LPGAS

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General Requirements

Propane cylinders for use at fixed installations should be located outdoors in a well ventilated area, at or above ground level, where any gas leakage can safely disperse. They should never be stored indoors or below ground level or in sunken depressions. Note both Butane and Propane gases are heavier than air, leakages of gas will tend to sink to the lowest level.

Cylinders should not be located where they may be subject to temperatures in excess of 40°C. Where the cylinders are located up against a building wall, it should be two hours fire-resistant. They must not obstruct passageways or exits, and the area around them must be kept totally clear to facilitate easy access. They may not be kept or used under stairways. In particular, flammables or combustibles (e.g. rubbish) should be kept at least 1.5 m from the cylinders.

Dust caps should be fitted to all unconnected cylinders, whether empty or full, Butane or Propane. Cylinders should always be used and stored in an upright position. Propane Cylinders must be located on a firm and level surface and precautions taken to prevent them falling over, such as chaining the cylinder collar to a wall or using a close-fitting cage or hood. A cage may be required to prevent deliberate or inadvertent interference (e.g. where there is uncontrolled access to the cylinders). A cage or guard may be necessary if the cylinders would otherwise be exposed to vehicular impact. Cages must be noncombustible with high and low level ventilation. The cylinders should be oriented so that the pressure relief valve of one cylinder does not point at another cylinder.

For Propane cylinders, Automatic Changeover Regulators (which switch to reserve cylinder(s) when the main cylinder(s) run out) are recommended in all cases: they ensure continuity of supply and avoid the need to have unconnected spare cylinders.

It is also recommended that, where there are more than two cylinders connected to a manifold, 'Super Safe' pigtails (hoses) are fitted – these have an excess-flow valve at one end and a backcheck valve at the other end. Do NOT make up your own pigtails, obtain them from a reputable supplier.

Where two or more cylinders are connected to a manifold, a main isolation valve should be fitted to the outlet of the manifold.

MINIMUM SEPARATION DISTANCES REQUIRED BETWEEN VARIOUS FEATURES AND A CYLINDER INSTALLATION (METRES)

1.0	Windows; doors; air vents; balanced-flue outlets; trapped drains
1.5	Parked motor vehicle; fixed sources of ignition; unprotected electrical equipment; flammable or combustible material
3.0	Untrapped drain or sealed gully; bund wall for oil tanks; openings to cellars or basements; corrosive, toxic or oxidizing
	materials; storage of flammable liquids
6.0	Mechanical air intakes
Note: Openings into chimneys or air intakes shall be at least 1.0 m above the top of any cylinder. Other openings shall be at least 0.3	
m above the top of any cylinder.	

Additional Requirements Specific to Domestic Cylinder Installations

If you have propane cylinders supplying your installation and they are located in an enclosed yard, no more than six cylinders are permitted. In addition, the yard must have a minimum area of 30 m², unless all the pigtails / hoses are 'SuperSafe' ones (these have an excess-flow valve at one end and a backcheck valve at the other end), when the minimum area is reduced to 15 m².

Additional Requirements Specific to Non-Domestic Cylinder Installations

Cylinders shall be not be located within 3 m of any final (fire) exit from a building or any route/passageway from a final exit which is required so that persons escaping can reach an unconfined space in the open air. Cylinders in an escape route or passageway from a fire exit shall not reduce the width of the route to less than the width of the building exit. Suitable access to the cylinders for the emergency (fire) services shall be provided.

Installations up to 400 Kg gas capacity can be located up against boundary walls or building walls which are fire walls, otherwise they must be kept 1.0 m away. Above 400 Kg up to a maximum of 1000 Kg they must be 3.0 m from boundaries that are not fire walls and 3.0 m from buildings (where the building wall is a fire wall, the distance to a building may be reduced to 1.0 m).