

Flogas guidance for Installation of Underground vessels

The pit should be excavated as per the dimensions shown in the table below. The design of the installation is such that the top of the turret on the LPG vessel shall protrude slightly from the finished ground level. This is to prevent a build-up of water inside the vessel hood which may impede gas deliveries.

The finished ground level should slope up to the vessel lid.

The bottom of the pit should be excavated to the depth shown and then compacted. The concrete base(s) are to be laid at the bottom of the pit. There are two “steps” on the side of the pit; these are to allow our engineers access to fit the pipework and associated gas equipment to the vessel.

The Underground Vessel is protected from corrosion by use of a cathodic protection system which is made up from 2no “sacrificial” anode bags. These bags should be installed 1m away from the vessel in plain view, and so that the top of the bag is no higher than the centreline of the vessel. Due to the requirements the location for the bags should be dug into the back of the step as shown.

The backfill material for the 500mm (0.5m) directly around the vessel should be pea gravel graded 6mm to dust. This material is to allow for water drainage around the vessel as well as to protect the coating on the LPG vessel.

Above ground vessel siting checklist for all domestic vessels

There are regulations which must be adhered to regarding siting the LPG vessel. If any of these cannot be met please speak to the Flogas Installations Team on 0116 2649016 who will be able to give specialist, individual advice.

The vessel must be located:

- † 3m from any buildings (including outbuildings such as sheds), boundaries, fixed sources of ignition (lights, electrical sockets etc), man hole covers, drains, oil vessels and vehicle parking.

The vessel must not be located:

- † Underneath any overhead power cables – there must be at least 1.5m distance, in plain view, from a low voltage cable (below 1.0KV_a) or 10m for a high voltage cable (equal to or above 1.0KV_a) to the vessel.

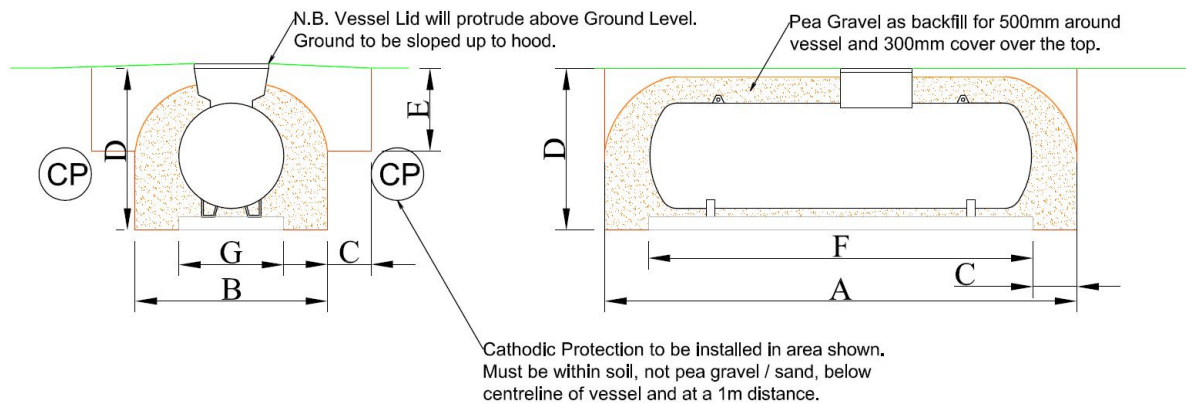
Vessel screening

You may wish to screen the Flogas Britain Ltd LPG vessel in your garden. There are a number of options that are available. Please speak to the Flogas Installations Team in order to ensure that you meet the distance and ventilation requirements.

Trenching and pipework

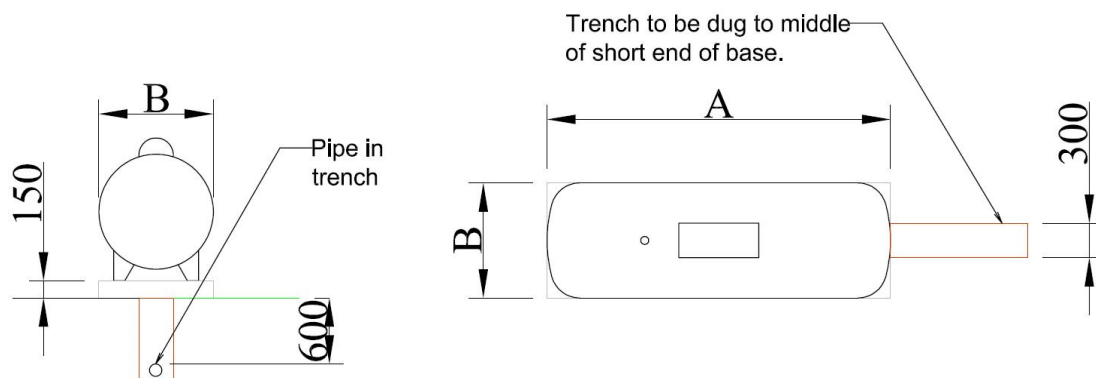
The gas pipe is required to be laid at a depth of at least 600mm or 750mm if going under a roadway. The depth can be reduced under some circumstances, please speak to the Flogas Installations Team on 0116 2649016 for specific guidance. The trench should come to the middle of the short end of the base. Trenches are required for all bulk gas installations, whether above or below ground.

Underground vessel excavation specifications

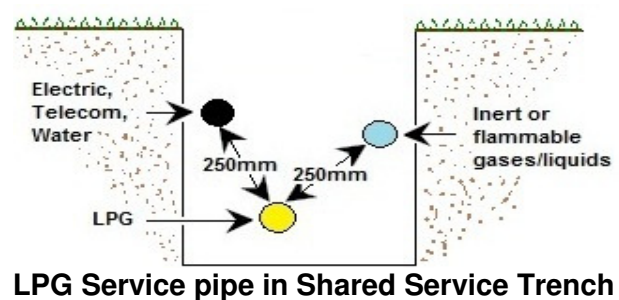


Essential Dimensions - UNDERGROUND Vessels								Vessel Selected
Vessel Size	A	B	C	D	E	F	G	
1410 / 1600	3.2m	2m	0.5m	1.55m	0.8m	2.2m	1m	
2200	4m	2m	0.5m	1.55m	0.8m	3m	1m	
4600	5.4m	2.2m	0.5m	1.85m	0.95m	4.4m	1.2m	

Above ground vessel specifications



Essential dimensions - ABOVEGROUND Vessels			Vessel Selected
Vessel Size	A	B	
1410	2m	1m	
1600	2.2m	1m	
2200	3m	1m	



The area immediately surrounding the gas pipe, above & below, should be sharp sand with no rocks or other items which may damage the pipewall. Gas marker tape should be laid 300mm above the pipe. The pipe route should be permanently recorded for future reference.