

**Unified Fire Authority
Residential Aboveground
LPG
Tank Requirements**

The following information is to be used whenever residential aboveground propane tanks are installed. This information is to correlate with the International Fire Code and NFPA 58. Plans must be submitted and a permit secured prior to any above ground LPG tank installation exceeding 125 gallons with the exception of 500 gallon or smaller LPG tanks installed at R-3 occupancies (Residential).

Permit Required

105.6.27 LP-gas.

An operational permit is required for:

1. Storage and use of LP-gas.

Exception: A permit is not required for individual containers with a 500-gallon (1893 L) water capacity or less serving occupancies in Group R-3(Residential).

Aboveground LPG Tanks

1. Installer Certification

Installation of any LPG tank is only to be done by individuals and companies that are certified by the Utah State Fire Marshals Office.

2. Tank Capacities

IFC 3804.2 The maximum aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons.

3. Tank Locations

Consult IFC Table 3804.3 for location of LPG containers. In many instances tanks will have to be a minimum of 25 feet from buildings, public ways, or lot lines of adjoining property.

4. Tank Security

IFC 3807.1 Tank has a method of locking and securing the operational valves.

5. Signs

IFC 3807.2 No smoking signs are posted on the tank. Sign to read, "NO SMOKING WITHIN 15 FEET".

6. Combustible Materials

IFC 3807.3 Weeds, grass, bush, trash and other combustible materials are kept a minimum of 10 feet away from LPG tanks.

7. Guard Posts

IFC 3807.4 If exposed to vehicular damage due to proximity to alleys, driveways or parking areas, LPG tanks, regulators and piping shall be protected by guard posts constructed of steel, not less than 4 inches in diameter, filled with concrete. Posts are to be spaced not more than 4 feet apart, set not less than 3 feet deep in a concrete footing of not less than a 15-inch diameter. The top of the posts is not to be less than 3 feet above the ground,

and located not less than 3 feet from the tank. Other means of tank protection if approved may consist of landscape type boulders, cement walls. etc.

8. Underneath Buildings

NFPA 58 LPG cylinders cannot be installed underneath any building unless the space is open to the atmosphere for 50 percent of its perimeter or more.

9. Painting

NFPA 58 The LPG tank shall be painted and marked to identify its content. The tank is to have a light color to prevent heat absorption. White, silver, etc. is acceptable.

10. Power Lines

NFPA 58. The LPG tanks and any of its parts, shall not be located within 6 feet of a vertical plane beneath overhead electric power lines that are over 600 volts.

11. Installation Foundation

NFPA 58 Tanks shall be installed upon a firm foundation or be otherwise firmly secured. Recommended is a 4-inch thick concrete pad with a minimum ½-inch x 6-inch grade 8 galvanized bolts.

12. Shut off Valves

A readily accessible shutoff valve shall be located at the tank, at the upstream side of the secondary regulator prior to entering the building and at each appliance.

Aboveground LPG Tank Inspection Checklist

- Plans are submitted and approved showing tank placement.
- Tank does not exceed 2,000 gallons water capacity.
- Tank installed by a Utah Fire Marshals Office, licensed and certified company.
- Permit for tank installation on site.
- Tank must be ASME approved as indicated on the tank.
- Tank is not larger than 2,000 gal. water capacity.
- Tank is located per IFC Table 3804.3.
- Tank has a method of locking and securing the operational valves.
- No smoking signs are posed on the tank.
- Weeds, grass, bush, trash and other combustible materials are kept a minimum of 10 feet away from the LPG tank.
- Guard posts are installed if necessary per item 7 above.
- LPG cylinders cannot be installed underneath any building. See item 8 above.
- The LPG tank shall be marked to identify its content.
- The LPG tank is located in relation to overhead power lines per item 9 above.
- Tanks shall be painted.
- Tank is installed upon a firm foundation and/or is firmly secured.
- Shut off valve accessible.