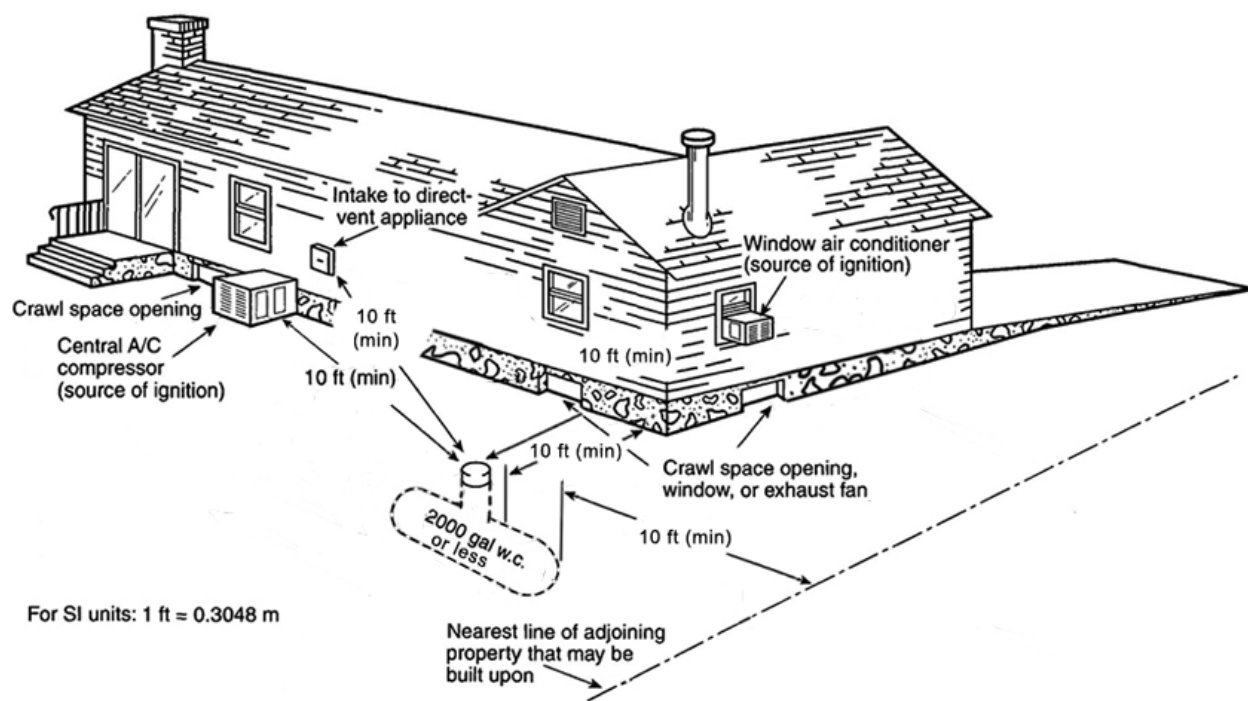


Crowley Fire Department Underground LPG Tank Requirements 2015 IFC Section 6104 and Current IFCA

Underground Propane Tank Installation

Underground propane tanks are exposed to unique environmental conditions and have distinct regulations and standards regarding their installation and maintenance thru NFPA 58. Underground propane tanks are designed and manufactured with specialized features that allow them to safely store propane underground for years. Obviously, propane tanks manufactured for above-ground use cannot be installed underground.

The location of underground propane tanks should be carefully thought out. Like above-ground propane tanks, they should be situated an adequate distance from your home and outbuildings. Underground propane tanks should not be in a location that is near or underneath any sort of vehicular traffic.



Underground Propane Tank Protection

Underground propane tanks are exposed to hostile conditions that can shorten their service life.

The earth contains natural electromagnetic currents that can create a phenomenon known as electrolysis, which is the erosion of the steel molecules of the underground propane tank. Over time, electrolysis can erode enough steel molecules to threaten the integrity of the underground propane tank. This can lead to propane tank failure and dangerous gas leaks.

6104.2 Maximum Capacity within Established Limits; change to read as follows:

6104.2 Maximum capacity within established limits. Within the limits established by law restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested commercial areas, the aggregate capacity of any one (1) installation shall not exceed one thousand (1,000) gallons of water capacity; except that in particular installations, this capacity limit may be increased subject to the approval of the City Council after consideration of special features such as topography conditions, the nature of the occupancy and the proximity to buildings, the capacity of the proposed tanks, the degree of private fire protection to be provided, compliance with LPG safety rules established by the Railroad Commission of Texas. The established limits as described above shall mean the City Limits of Crowley.

Exception:

1. Except as permitted in 6103 and 6104.2, LP-Gas containers are not allowed in residential areas.
2. Except as permitted in Sections 308 and 6104.3.2, LP-gas containers are not permitted in residential areas.

(Reason: To provide a consistent and reasonable means of regulating the use LP-Gas containers. Reduces the hazard presented by such containers when natural gas is already available. References regional amendment to IFC 6104.3.2. Please note that current State Law does not allow for the enforcement of any rules more stringent than that adopted by the State, so this amendment is only applicable as to the extent allowed by that State Law.)

*****Section 6104.3; add Section 6104.3.2 to read as follows:***

6104.3.2 Spas, Pool Heaters, and Other Listed Devices. Where natural gas service is not available, an LP-gas container is allowed to be used to supply spa and pool heaters or other listed devices. Such container shall not exceed 250-gallon water capacity per lot. See Table 6104.3 for location of containers.

(Reason: Allows for an alternate fuel source. Dwelling density must be considered and possibly factored into zoning restrictions. Reduces the hazard presented by over-sized LP-Gas containers. Please note that current State Law does not allow for the enforcement of any rules more stringent than that adopted by the State, so this amendment is only applicable as to the extent allowed by that State Law.)

Section 6104.3; add Section 6104.3.3 to read as follows:

6104.3.3 Location of LP-Gas Containers. Where LP-Gas containers are allowed, any tanks with a water **capacity greater than one-hundred-twenty (120) gallon water capacity will be required to be underground containers.** All tanks required to be underground shall be approved for this application and meet all standards set by the Texas Railroad Commission and Standards established in NFPA 58. A permit is required for any LPG installation. A detailed drawing or plot plan shall accompany all permit applications. A copy of the state-issued (LPG) license shall be submitted with all permit applications.

******Section 6107.4 and 6109.13; change 6107.4 and add Section 6109.13 to read as follows:***

6107.4 Protecting Containers from Vehicles. Where exposed to vehicular damage due to proximity to alleys, driveways, or parking areas, LP-gas containers, regulators and piping shall be protected in accordance with Section 312.

6109.13 Protection of Containers. LP-gas containers shall be stored within a suitable enclosure or otherwise protected against tampering. Vehicle impact protection shall be provided as required by Section 6107.4.

(Reason: NFPA 58 does not provide substantial physical protection [it allows raised sidewalks, fencing, ditches, parking bumpers as 'vehicle barrier protection'] of the container(s) from vehicular impact as is required and has been required historically, as per Section 312, i.e. bollard protection. Further, the exception to Section 6109.13 would allow for portable containers in ventilated metal cabinets to not require any physical protection whatsoever from vehicular impact, regardless of the location of the containers. Please note that current State Law does not allow for the enforcement of any rules more stringent than that adopted by the State, so this amendment is only applicable as to the extent allowed by that State Law.)