



## Residential Propane/LPG Installation Requirements

- Installations must be compliant with the International Fire Code (IFC) 2021 edition and the National Fire Protection Association (NFPA) 58, 2020 edition.
- Dispensing into other vessels from this tank is not permitted.
- A permit is not required for residential propane/liquified petroleum gas (LPG) tanks less than 125 gallons. A permit to install any sized tank underground is required.
- A design professional is not required to stamp plans submitted for installations.

Apply On-Line at [MyBuildingPermit.com](https://www.mybuildingpermit.com)

Select: King County | Fire | Single Family | (Activity) | Storage Tank



<b>Location:</b>	LPG tanks must be located away from building public ways or neighboring property as follows: 125 to 500 gallons, 10-foot separation 501 to 2,000 gallons, 25-foot separation
<b>Support:</b>	Tanks must be placed on a concrete pad, paved surface, or firm level earth. Tanks located within the FEMA 100-year floodplain must be securely anchored.
<b>Combustibles:</b>	A space of at least 10 feet out from the tank must be maintained free from dry grass, weeds, and any other combustible material at all times.
<b>Protection:</b>	Tanks located in close proximity to driveways, alleys, or streets must be protected with bollards, guard posts and/or curbing.
<b>Marking:</b>	Tanks shall be marked <b>“NO SMOKING” &amp; “FLAMMABLE, LP-GAS, PROPANE OR BUTANE.”</b>
<b>Appliances:</b>	Tanks are only allowed to be connected to appliances that are listed and/or approved for LPG fuel.

### Other Permits:

A Gas Piping Permit must be obtained from the [Public Health – Seattle & King County](#). Final inspection/approval of the Gas Piping Permit is required prior to final approval of the LPG tank permit.

A [Residential Mechanical Permit](#) may be required if installing/replacing a furnace, fireplace, or fireplace insert.

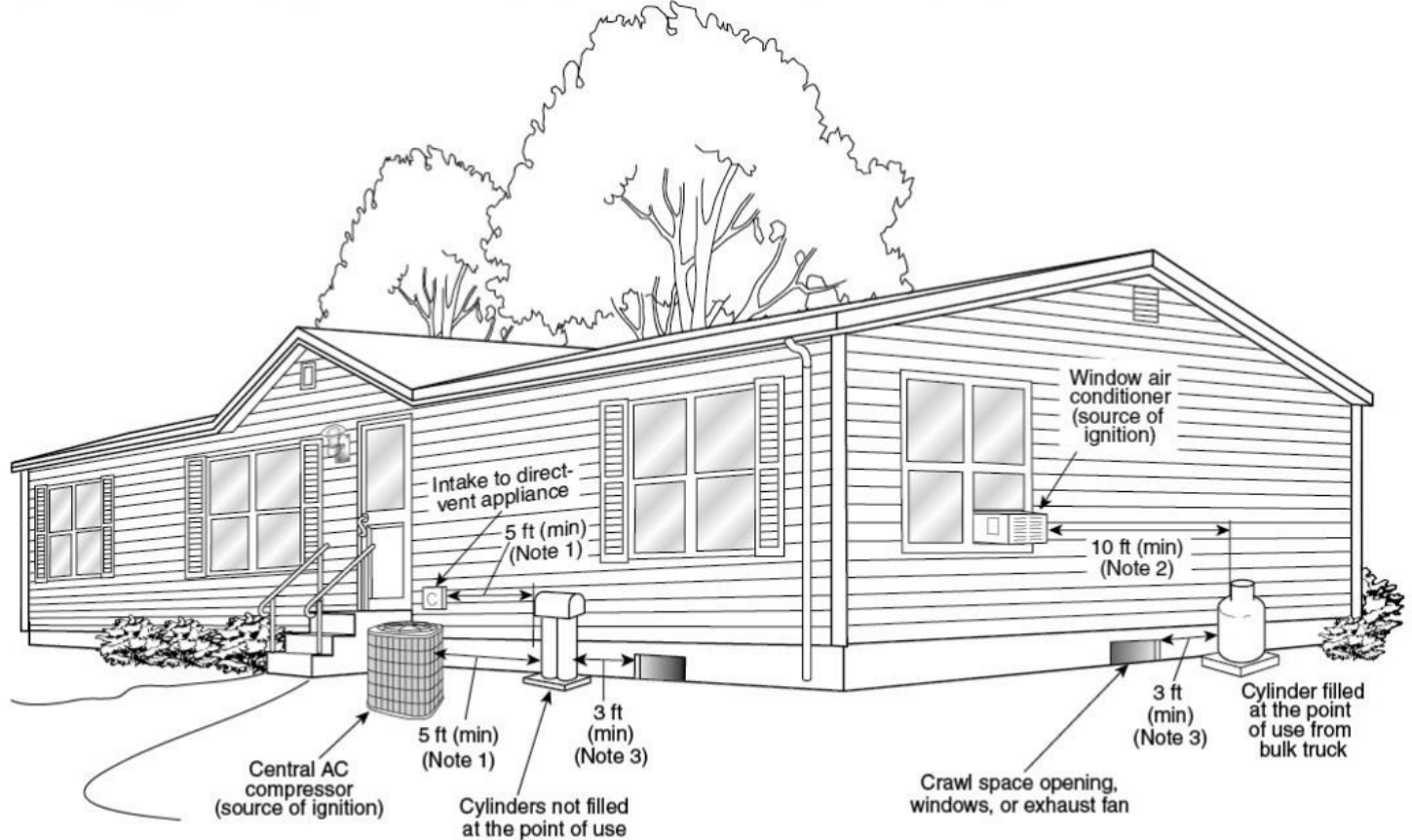
Tanks installed for commercial use require a [Fire, Systems Other Systems and Equipment](#) permit.

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## Tank Placement Guidelines:

Aboveground Tank Example 1 – Per National Fire Protection Association (NFPA) 58, 2020 edition.

Figure I.1(a) Cylinders. (Figure for illustrative purposes only; code compliance required.)



For SI units, 1 ft = 0.3048 m.

### Notes:

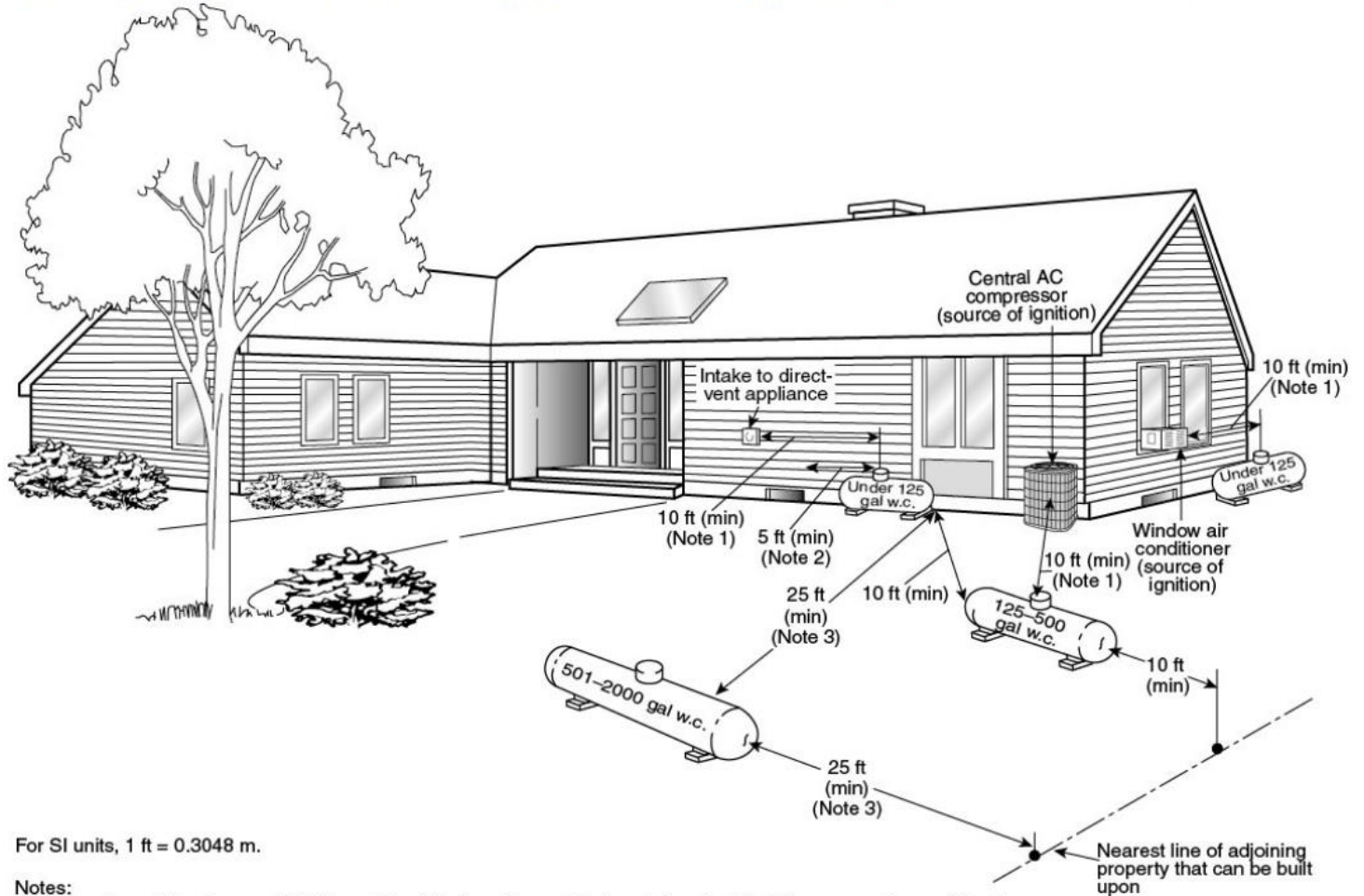
- (1) 5 ft minimum from relief valve in any direction away from any exterior source of ignition, openings into direct-vent appliances, or mechanical ventilation air intakes. Refer to Table 6.4.4.3.
- (2) If the cylinder is filled at the point of use from a cargo tank motor vehicle, the filling connection and vent valve must be at least 10 ft from any exterior source of ignition, openings into direct-vent appliances, or mechanical ventilation air intakes. Refer to 6.4.4.3.
- (3) Refer to 6.4.4.3.

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Aboveground Tank Example 2 – Per (NFPA) 58, 2020 edition.

Figure I.1(b) Aboveground ASME Containers. (Figure for illustrative purposes only; code compliance required.)



For SI units, 1 ft = 0.3048 m.

**Notes:**

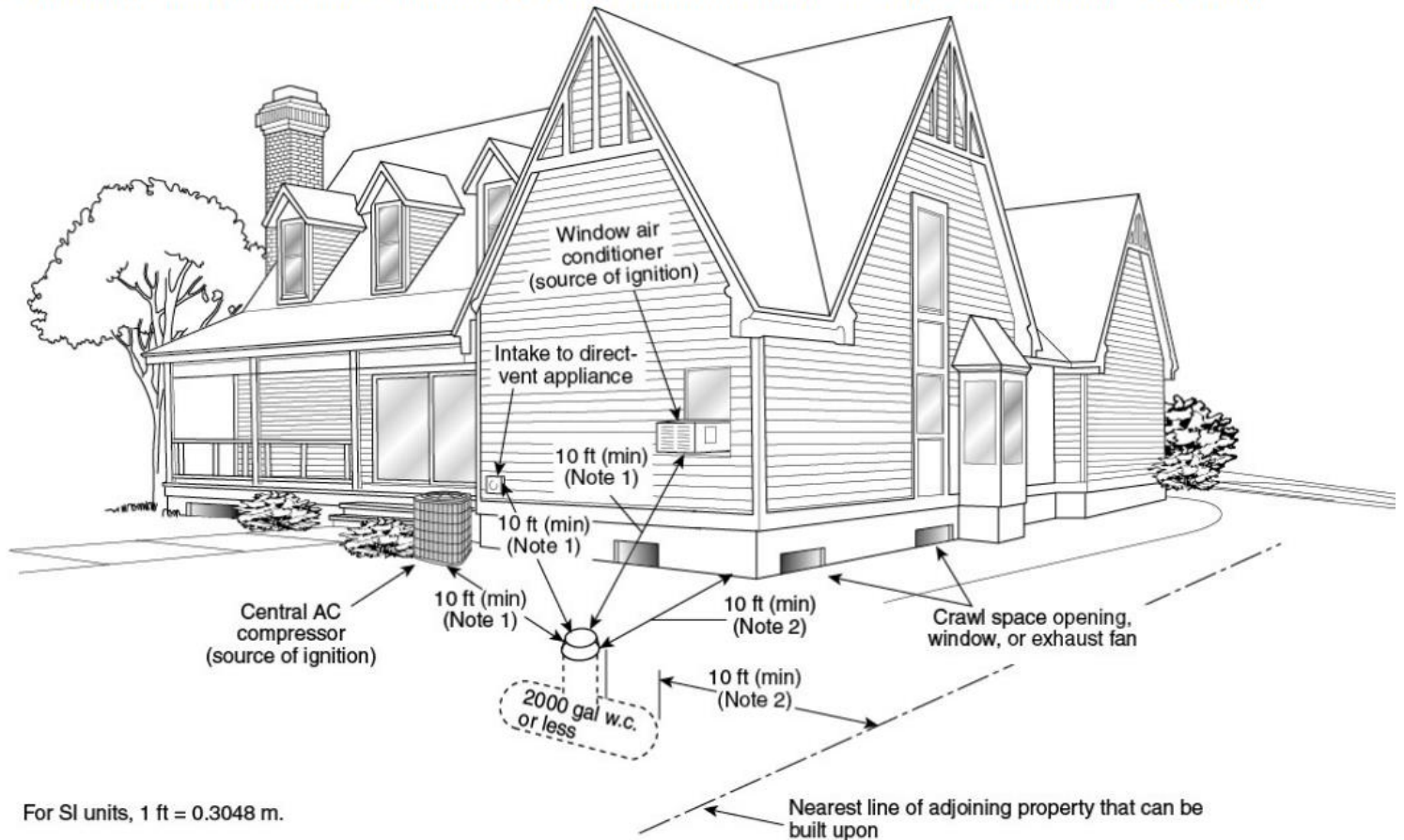
- (1) Regardless of its size, any ASME container filled on site must be located so that the filling connection and fixed maximum liquid level gauge are at least 10 ft from any external source of ignition (e.g., open flame, window AC, compressor), intake to direct-vented gas appliance, or intake to a mechanical ventilation system. Refer to 6.4.4.3.
- (2) Refer to 6.4.4.3.
- (3) This distance can be reduced to no less than 10 ft for a single container of 1200 gal (4.5 m<sup>3</sup>) water capacity or less, provided such container is at least 25 ft from any other LP-Gas container of more than 125 gal (0.5 m<sup>3</sup>) water capacity. Refer to 6.4.1.3.

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Underground Tank Example – Per (NFPA) 58, 2020 edition.

Figure I.1(c) Underground ASME Containers. (Figure for illustrative purposes only; code compliance required.)



For SI units, 1 ft = 0.3048 m.

**Notes:**

(1) The relief valve, filling connection, and fixed maximum liquid level gauge vent connection at the container must be at least 10 ft from any exterior source of ignition, openings into direct-vent appliances, or mechanical ventilation air intakes. Refer to 6.4.4.4.

(2) No part of an underground container can be less than 10 ft from an important building or line of adjoining property that can be built upon. Refer to Table 6.4.1.1.

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## Additional Resources:

### King County

[Department of Local Services, Permitting Division](#)

[Permit Fees](#)

[Check permit status](#), [make a payment](#), and [schedule inspections](#)

[Fuel Tanks, Site Plan \(Example, Template \(PDF\), Template \(CAD\)\)](#)

[Residential Mechanical Permit](#)

### Floodplain Information

[King County iMap](#)

[Districts and Development Conditions Report](#)

### Seattle-King County Public Health

[Plumbing and Gas Piping](#)

*End of Handout*