

# Town of East Lyme



## FAQ's

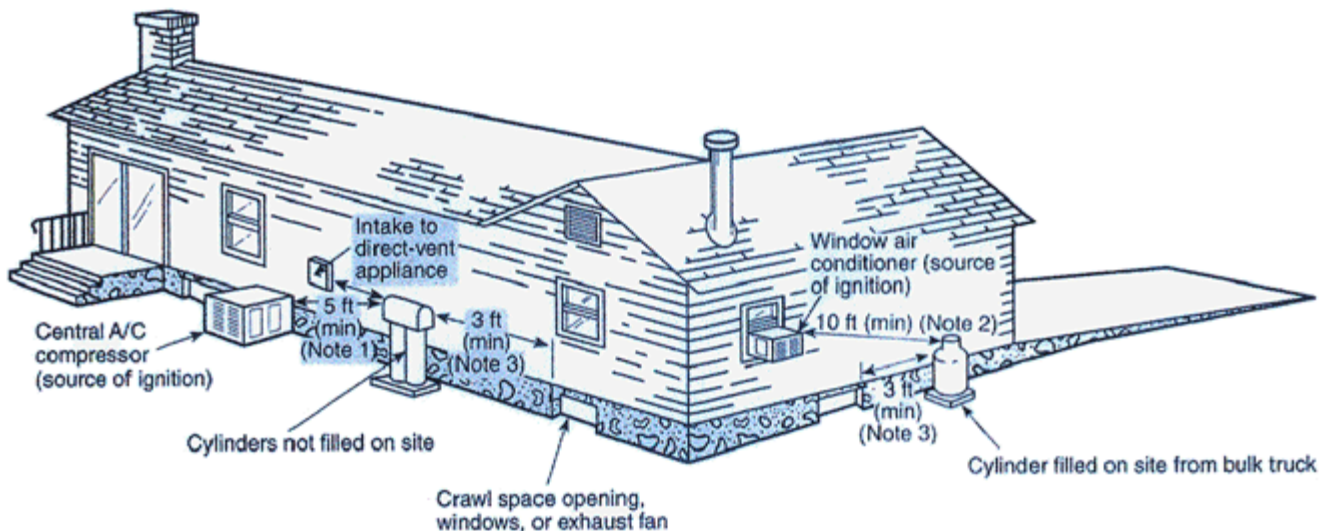
### Gas Installations

#### One and Two-Family Dwellings

For new tank installations, please review the NFPA 58 required clearances and distances to building openings and property lines. Note that the Town's Zoning Regulations may have differing minimum set back distances from property lines. All the regulations for your zone may be reviewed at our web site: [www.eltownhall.com](http://www.eltownhall.com).

Please submit a Building Permit Application with a site plan showing proposed distances to these items.

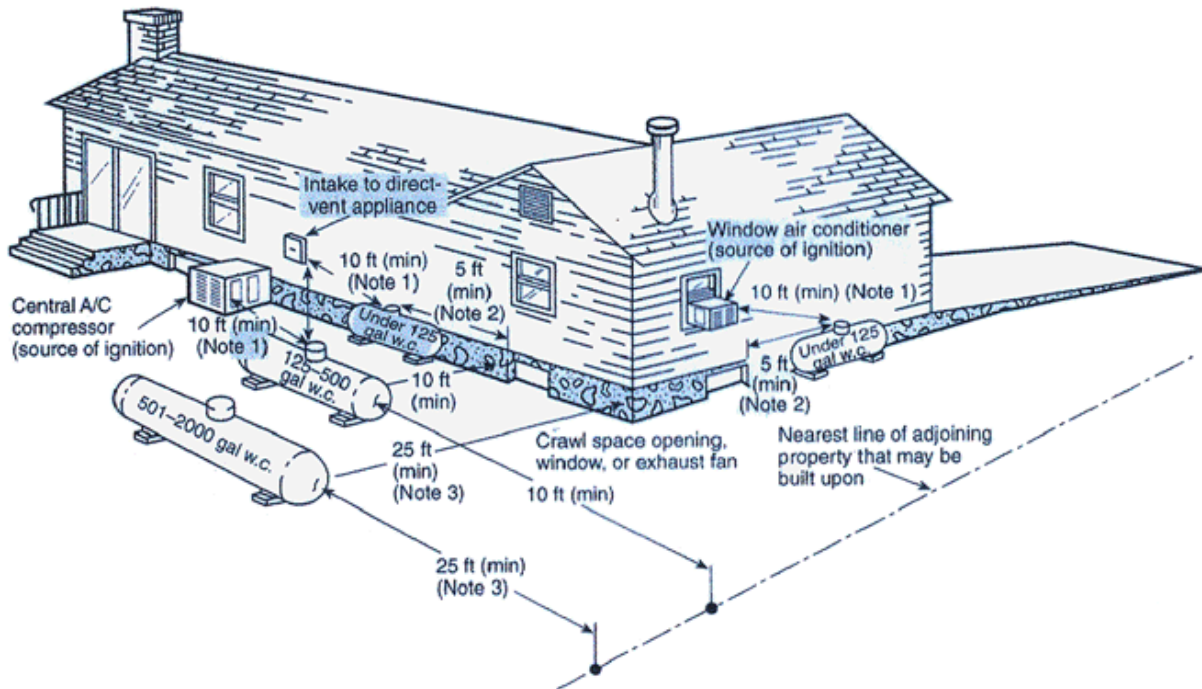
Figure 1.1(a) - Cylinder Installations



**Notes:**

- 1) Minimum 5-feet 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 3-2.2.2(b).
- 2) If the cylinder is filled on site from a bulk truck, 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 3-2.2.2(d).
- 3) Refer to 3-2.2.2(b).

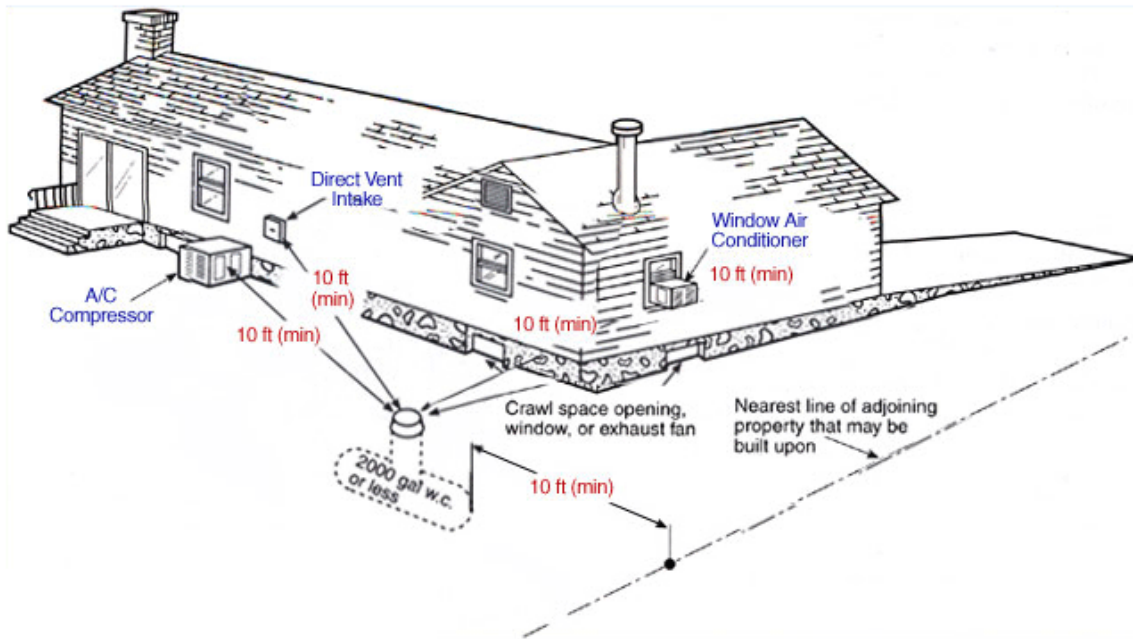
**Figure 1.1(b) - Above Ground ASME Installations**



**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 A/C, compressor), intake to direct-vented gas appliance, or intake to a mechanical ventilation system. Refer to 3-2.2.2(d)
- 2) Refer to 3-2.2.2(c).
- 3) This distance may 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 3-2.2.2(e).

**Figure 1.1(c) - Below Ground ASME Installations**



**Notes:**

- 1) The relief valve, filling connection, and liquid fixed maximum 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 3-2.2.2(f).
- 2) No part of an underground container shall be less than 10 ft from an important building or line of adjoining property that may be built upon. Refer to 3-2.2.2(f).

## ***Relevant details of important applicable sections from the 2012 International Residential Code Portion of the 2016 Connecticut State Building Code as amended:***

### **Smoke and Carbon Monoxide Alarms:**

Per Section R314 and R315, when alterations requiring a permit occur the entire dwelling unit shall be provided with alarms located as required for new dwellings.

Alarms shall receive their primary power from the building wiring, with a battery backup. Wiring shall be permanent and without a disconnect switch other than those required for overcurrent protection. Where more than one alarm is required to be installed within an individual dwelling, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

Exception: Hard-wiring and interconnection of alarms in existing areas is not required where the alterations do not result in the removal of interior wall or ceiling finishes.

### **Generators:**

Per Section M1305.1.4.1, equipment and appliances shall be supported on a concrete slab or other approved material extending not less than 3 inches above the adjoining ground. Such support shall be in accordance with the manufacturer's installation instructions.

### **General:**

Per Section G2404.3, all appliances must be listed and labeled for the application.

Per Section G2406.2, unvented appliances shall not be installed in sleeping areas if input exceeds 10,000 btu/hour.

### **Combustion Air:**

Per Section G2407.5, required indoor combustion air volume must consider all appliances in the space. Standard requirement is 50 cubic feet/1,000 btu/h input is valid for spaces with an infiltration rate of at least 0.40 ACH, otherwise see Section G2407.5.2.

Per Section G2407.9.2, when mechanically supplied combustion air is used, each piece of equipment must be connected with an interlock circuit which prevents operation without combustion air.

### **Bonding:**

Per Section G2411.1, each above-ground portion of a gas piping system that is likely to become energized shall be electrically continuous and bonded to an effective ground-fault current path. Gas piping, other than CSST, shall be considered to be bonded where it is connected to appliances that are connected to the equipment grounding conductor of the circuit supplying that appliance.

Per Section 2411.1.1, gas piping systems that contain CSST shall be bonded to the electrical service grounding system. The bonding jumper shall be not smaller than 6 AWG copper wire or equivalent and shall connect to a metallic pipe or CSST fitting.

*Note: Connection to the existing intersystem bonding terminal, ground rod, or copper water service line is acceptable, and may be installed by any tradesperson. Connections made within the electrical load center or service equipment enclosures must be made by properly licensed Electrical contractors.*

### **Labeling:**

Per Section G2412.5, for other than steel pipe, exposed piping shall be identified by a yellow label marked "GAS" in black letters spaced maximum 5 feet apart. Multiple meter installations must be identified with a metal tag or approved equal.

### **Protection:**

Per Sections G2414.5.3, G2415.7, and manufacturers installation instructions, piping other than steel must be protected when restrained in concealed locations or subject to physical damage.

### **CSST (Corrugated Stainless Steel Tubing)**

Must be installed in accordance with manufacturers instructions. Bends must not exceed 90 degrees with a minimum radius of 6 times the outside tube diameter. When installed through foundations must be sleeved and sealed. Holes provided in wood framing must be a minimum of 3/4" larger than tubing diameter. When restrained must have protection plates a minimum of 4" past restraint. CSST may not be installed in a firebox.

### Pressure Testing:

Per Section G2417, the test pressure shall not be less than 1.5 times the maximum working pressure but not less than 3 psig. The highest end of the gauge scale cannot exceed 5 times the test pressure. Pressure must hold for a minimum of 10 minutes.

**Note:** Starting pressure, date, time, and temperature must be noted on a tag left at the gauge.

### Supports:

Per Section 2418.2, pipe supports shall be compatible metal hooks, straps, bands, hangers, etc. suitable for the size of the piping and adequate strength per MSSS SP-58 and spaced in accordance with Table G2424.1. (Shown Right).

Type	Diameter	Minimum Spacing
Pipe	1/2"	6'
	3/4"-1"	8'
	1-1/4" +	10' & Every Floor
Tubing	1/2"	4'
	5/8" - 3/4"	6'
	7/8" - 1"	8'
	1" +	10' & Every Floor

### Sediment Traps:

Per Section G2419.4, where a sediment trap is not incorporated as part of the appliance, a sediment trap shall be installed downstream of the appliance shutoff valve as close to the inlet of the appliance as practical.

The sediment trap shall be either a tee fitting having a capped nipple of any length installed vertically in the bottommost opening of the tee as illustrated in Figure G2419.4 (Shown Right) or other device approved as an effective sediment trap.

Illuminating appliances, ranges, clothes dryers, decorative vented appliances for installation in vented fireplaces, gas fireplaces (inserts), and outdoor grills need not be so equipped.

### Appliance Shutoff Valves:

Per Section G2420.5, each appliance shall be provided with a shutoff valve in accordance with Section G2420.5.1, G2420.5.2 or G2420.5.3.

Per Section G2420.5.1, the shutoff valve shall be accessible and located in the same room, within 6 feet, of the appliance, and shall be installed upstream of the union, connector or quick disconnect device it serves.

Appliance shutoff valves located in the firebox of a fireplace shall be installed in accordance with the appliance manufacturer's instructions.

Per Section G2420.5.2, shutoff valves for vented decorative appliances, room heaters and decorative appliances installed in vented fireplaces shall be permitted to be installed in an area remote from the appliances. Such valves shall be readily accessible, permanently identified, and serve no other appliance.

Per Section G2420.5.3, where the appliance shutoff valve is installed at a manifold, it shall be located within 50 feet of the appliance served, be readily accessible, and permanently identified.

The piping from the shutoff valve to within 6 feet of the appliance shall be designed, sized and installed in accordance with Sections G2412 through G2419. All outlets must be connected or capped.

### Regulator Venting:

Per NFPA 58 Section 6.7.4.8 vent must be located a minimum of 3 feet horizontally and below any building opening, and 5 feet from any source of ignition or mechanical air intakes.

Per Section 2421.3.1, vent piping for relief vents and breather vents shall be constructed of materials allowed for gas piping in accordance with Section G2414. Terminations must be protected from weather and insects.

Regulator vent piping shall not smaller than the vent connection on the pressure regulating device and not exceed the length specified in the regulator manufacturer's installation instructions, which must be provided with the permit application.

### Miscellaneous:

Per Section G2525.5 abandoned chimney inlet openings must be closed by an approved method.

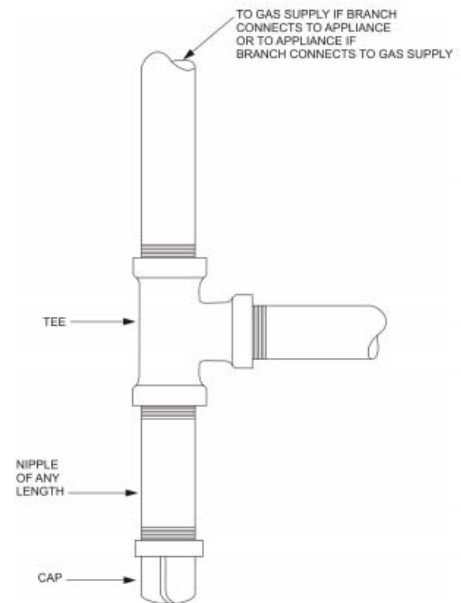


FIGURE G2419.4  
METHOD OF INSTALLING A TEE FITTING SEDIMENT TRAP