The distances to be followed for installations are the distances as listed below. These distances reflect the combined requirements of NFPA 55:2010 and Linde requirements. (Refer to these codes for clarification). Additional requirements may be imposed by the Local Authority having Jurisdiction.

**NOTE:** Distances are measured from the storage container, vaporizers, and the discharge points of pressure relief devices, liquid connections, trycock valve and are in feet.

### Flammable Gases Above Ground
(Non-Liquefied, dissolved, or compressed gases)

- ≤ 25,000 cu ft  
  NFPA = 25
- > 25,000 cu ft  
  NFPA = 50

**Note #1**

<table>
<thead>
<tr>
<th>Substance</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid Hydrogen (any volume)</td>
<td>75</td>
</tr>
</tbody>
</table>

### Heliport (NFPA 418-2011 Standard for Heliports section 4.3 Tank Locations)
NFPA = 50

Direct line distance from the inner container pressure relief discharge outlets, filling and vent connections to nonambulatory patients

- NFPA = 5

### Horizontal distance from the vertical plane below nearest overhead wire of an electric trolley, train, or bus line.
NFPA = 50

### Distance to piping containing other hazardous materials
(all classes of flammable, combustible, toxic and corrosive liquids or gases)
NFPA = 15

### Above Ground Bulk Storage

- Combustible or Flammable Liquids or Flammable Liquefied Gas
  - ≤ 1000 gal  
    NFPA = 25
  - > 1000 gal  
    NFPA = 50

**Note #1**

### Below Ground Bulk Liquid Storage

- Combustible or Flammable
  - To The Vessel  
    NFPA = 15
  - To Any Fill Connections or Vents  
    NFPA = 25

**Note #1**

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### Buildings of wood frame construction or combustible structures
NFPA = 50

**Note #1**  **Note #2**

### Structures of other than wood frame construction
NFPA = 1

**Note #3**

### Inlet of an underground sewer, drains.
NFPA = 8

### Public sidewalks or parked vehicles
NFPA = 10

**Note #1**

### Places of public assembly and congested areas such as offices, lunchrooms, locker rooms, time clock areas and similar areas where people may congregate
NFPA = 50

**Note #1**

### Solid materials which burn rapidly such as excelsior or paper
NFPA = 50

**Note #1**

### Solid materials which burn slow such as coal and heavy timber
NFPA = 25

**Note #1**

### Weeds, long grass and combustible debris
NFPA = 15

### From any openings in walls of adjacent structures (this provision shall apply to all elements of a bulk oxygen system where the oxygen storage is high pressure gas. Where the storage is a liquid, this provision shall only apply to pressure regulators, safety devices, vaporizers, manifolds and interconnecting piping)
NFPA = 10

**Note #1**

### Note 1: These distances shall not apply where protective structures having a minimum fire resistance rating of two hours interrupt the line of site between the uninsulated portions of the bulk oxygen storage installation and the exposure. This wall should be no closer than 3 ft. to the system to allow for system maintenance. The wall should be designed to withstand anticipated wind and seismic forces. The protective structure protects uninsulated portions of the oxygen system from external fire exposure.

### Note 2: NFPA 55-2010 defines a building of wood frame construction as a building construction Type III, Type IV, and Type V, as defined in NFPA 5000. This includes any building whose exterior walls or interior frame are made wholly or partially of wood or do not have a fire resistance >2 hrs.

### Note 3: NFPA 55-2010 defines a building of approved non combustible or limited combustible materials as a building construction, Type I and Type II as defined in NFPA 5000. These structures are not of wood frame construction

### Note 4: Distances noted are for ventilation purposes for tank installations in courtyards(3 or more walls). Minimum clearances for other equipment (vaporizers, manifolds, etc) shall be at least 3 feet on all sides for system maintenance and operation.