

The distances to be followed for installations are the BOC distance as listed below. These distances reflect the combined requirements of NFPA 55 & 99-2005, 29 CFR.1910.104, and BOC GASES' own requirements. (Refer to these codes for clarification).

Additional requirements may be imposed by the Local Authority having jurisdiction.

NOTE: Distances are measured from the discharge point of pressure relief devices, liquid connections and are in feet.

B = BOC N = NFPA O = OSHA

Flammable gas storage (such as compressed gas, flammable gas, liquefied flammable gases, flammable gases in low pressure cylinders)			
Note # 1			
< 5,000 cu ft.	B = 50	N = #	O = 50
> 5,000 cu ft.	B = 90	N = #	O = 90
Liquid Hydrogen - any volume B = 100 N = 75 O = 100			

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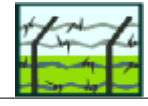
Public sidewalks or parked vehicles
B = 10 N = 10 O = #
Note # 1

Places of public assembly and congested areas such as offices, lunchrooms, locker rooms, time clock areas and similar areas where people may congregate
B = 50 N = 50 O = 25

Heliport (NFPA 418-1995 Standard for Heliports section 2-2 Tank Locations)
B = 50 N = 50 O = #
Direct line distance from the inner container pressure relief discharge outlets, filling and vent connections to nonambulatory patients
B = 50 N = 50 O = #



Any open flames
BOC = 50



Any line or adjoining property that may be built on
B = 5 N = 5 O = #
Note # 1

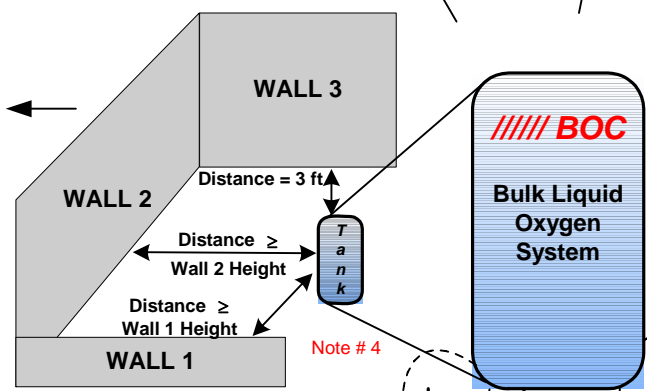


Solid materials which burn rapidly such as excelsior or paper
B = 50 N = 50 O = 50
Note # 1



Horizontal distance from the vertical plane below nearest overhead wire of an electric trolley, train, or bus line.
B = 50 N = 50
OSHA = shall not be beneath or exposed by the failure

Horizontal distance from the vertical plane below nearest overhead electrical wire other than those noted above
B = 15 N = 5
OSHA = shall not be beneath or exposed by the failure



Solid materials which burn slow such as coal and heavy timber
B = 25 N = 25 O = 25
Note # 1

Weeds, long grass and combustible debris
B = 15 N = 15 O = 15



Horizontal distance to pipelines carrying all classes of flammable and combustible liquids or flammable compressed gas
B = 15 N = 15
OSHA - shall not be beneath or exposed by the failure

Diameter of area for non-combustible surface where liquid O2 can drip
B = 3 N = 3 O = #

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)
B = 10 N = 10 O = 10

ABOVE GROUND
Bulk **COMBUSTIBLE** Liquid Storage
<1000 gal B = 25 N = 25 O = 25
>1000 gal B = 50 N = 50 O = 50
Note # 1

ABOVE GROUND
Bulk **FLAMMABLE** Liquid Storage
<1000 gal B = 50 N = 25 O = 50
>1000 gal B = 90 N = 50 O = 90
Note # 1

Buildings of wood frame construction or combustible structures
B = 50 N = 50 O = 50
Note # 1 Note # 2

Structures of other than wood frame construction
B = 3 N = 1 O = 1
Note # 3

BELOW GROUND
Bulk **COMBUSTIBLE** Liquid Storage
To The Vessel
B = 15 N = 15 O = 15
To Any Fill Connections, Vents
B = 40 N = 25 O = 40
Note # 1

BELOW GROUND
Bulk **FLAMMABLE** Liquid Storage
To The Vessel
<1000 gal B = 15 N = 15 O = 15
>1000 gal B = 30 N = 15 O = 30
To any Fill Connections, Vents
B = 50 N = 25 O = 50
Note # 1

Inlet of an underground sewer, drains.
B = 8
N = 8
O = #

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 55-2005 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 of 2 hours.

Note 3: NFPA 55-2005 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.

Note 5: # Indicates no published standard.