

Oxy-Fuel Gas Cylinder Storage

OR 437  
Division 2/Q  
Division 3/J

Oxy-Fuel Gas Cylinder Storage

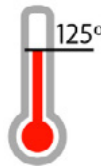
You must properly store oxygen and fuel-gas cylinders used for welding, cutting, brazing, soldering, and thermal spraying when they are not in use. Proper storage of these containers by trained employees will limit the risk of damage, preventing serious injury and limiting property damage during emergencies. You can find more information on the safe use and handling of oxygen and fuel gases for welding, cutting, brazing, soldering, and thermal spraying processes in the companion **Oxygen and Fuel-Gas Welding and Cutting** fact sheet.

OR 437-002-2253(2) defines cylinders in the following way:

**Cylinder(s)** – An approved DOT portable container used for transportation and storage of compressed gas. Generally a cylinder is a compressed gas container having a maximum water capacity of 454 kg (1000 lbs).

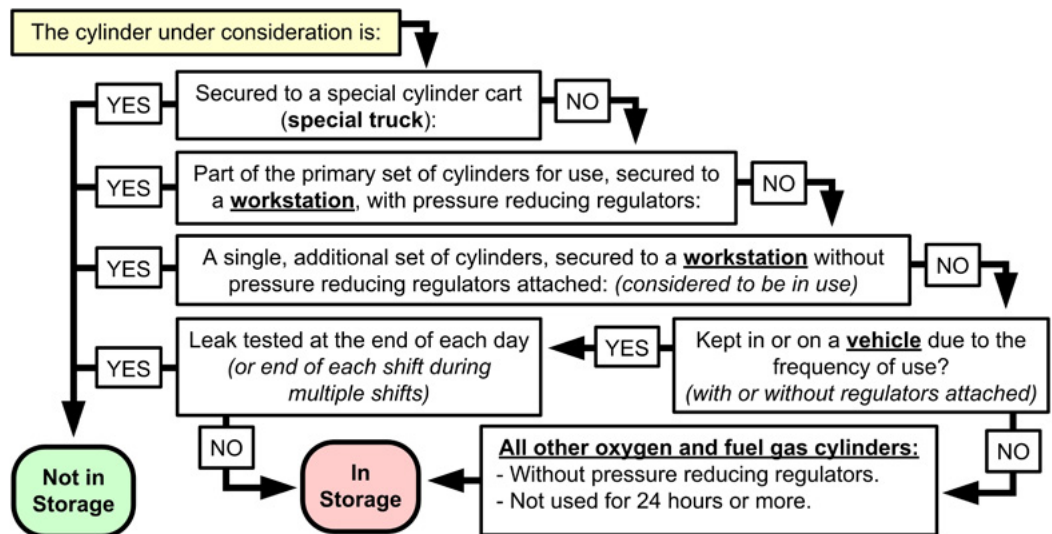
Storage of oxygen and fuel-gas cylinders must meet the requirements of OR 437-002-2253(6), Storage of Oxygen and Fuel Gas Cylinders. Store cylinders in assigned locations away from exit routes with prominent signs posted. Signs must identify the names of the gases being stored and prohibit smoking and open flames within 20 feet. Additionally, you must select locations where cylinders:

- Will not be tampered with by unauthorized employees.
- Will not be exposed to temperatures that exceed 125 degrees F.
- Are away from heat sources.
- Are not exposed to flames, hot slag, or sparks.
- Will not contact electrical welding equipment or electrical circuits.
- Are well ventilated, not inside a confined space, and never inside an unventilated enclosed space such as a closet, cabinet, toolbox, or automobile trunks.
- Cannot be damaged by passing or falling objects, be knocked over, or be struck by heavy objects.
- Are protected from corrosion and avoid prolonged exposure to damp environments.



When do the storage requirements of 437-002-2253(6) apply?

Store oxygen and fuel-gas cylinders used for welding, cutting, brazing, soldering, and thermal spraying when they are not in use. Definitions in OR 437-002-2253(2) provide the following guidance:



Website:  
osha.oregon.gov  
Salem Central Office  
350 Winter St. NE  
Salem, OR 97301-3882  
Phone: 503-378-3272  
Toll-free: 800-922-2689  
Fax: 503-947-7461



### Stored cylinders

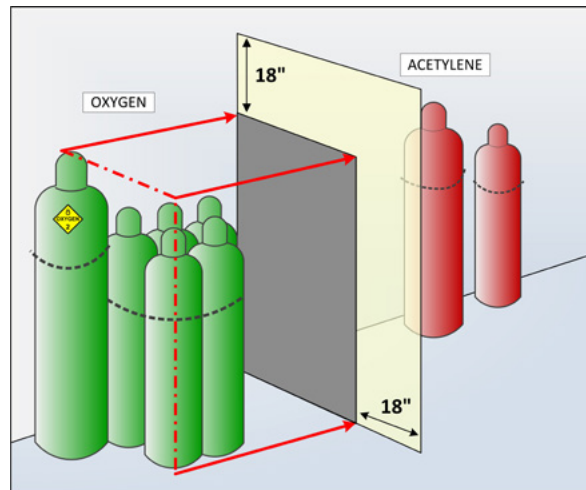
When oxygen and fuel-gas cylinders have been placed in assigned, safe storage locations, you must follow these guidelines:

- Install valve protection caps on cylinders designed to accept a cap.
- Position compressed gas, liquefied gas, refrigerated gas, and acetylene containers with the valve end up.
- Place refrigerated gas cylinders in a vertical position.
- Secure cylinders from movement.
- Close the individual oxygen and fuel-gas cylinder valves on portable cylinder banks.

Separate oxygen containers from fuel-gas containers, combustible materials such as oil and grease, and oxygen and fuel-gas cylinders secured on special trucks (cylinder hand trucks) by a minimum of 20 feet or with a noncombustible barrier.

Noncombustible barriers must be a minimum of 5 feet tall and have a fire resistance rating of 30 minutes or longer. Noncombustible barriers modified or constructed after May 1, 2015, must meet the following additional minimum requirements:

- **Extend vertically a minimum of 18 inches above the tallest cylinder and be at least 5 feet high.**
- **Extend horizontally a minimum of 18 inches beyond the side of the cylinders.**



### Resources

For the full text of Oregon OSHA rules for Oxy-fuel gas storage, refer to [OAR 437, Division 2/Q, 437-002-2253\(6\), Storage of Oxygen and Fuel Gas Cylinders](#)

(UL) Underwriters Laboratories offers the [ULTimate Fire Wizard](#) to assist in finding fire-resistant designs for structures such as partitions. This wizard helps locate fire-resistance-rated designs using common filter options. In a few steps, you can find, view, and print out the designs that meet your needs.

OR-OSHA (6/15) FS-62