

Oxygen (O₂) Sensor Requirements

In accordance with FDNY Fire Code §3205 and applicable OSHA requirements, oxygen (O₂) sensors are required in areas where 60 gallons or more of cryogenic liquids are dispensed. These sensors must continuously monitor oxygen concentrations and be equipped with an audible alarm that activates when the oxygen level falls below 19.5%.

Columbia University exclusively uses the PureAir O₂ Deficiency (Depletion) Monitor (Item #99016) for this purpose.

- **Installation Requirements:** The monitor must be securely wall-mounted approximately 5 feet above the finished floor and connected to a standard electrical outlet. If necessary, a dedicated outlet must be installed. Surface-mounted wire mold is strongly preferred to secure the power cord, and **hardwiring the unit is not permitted**. Each sensor has an approximate 20-foot detection radius and should be installed to provide adequate coverage while remaining accessible for inspections and maintenance. Larger spaces may require multiple sensors to ensure the entire area is within the detection range. Where applicable, sensor placement should consider the location of tanks and avoid installation immediately adjacent to tanks to prevent nuisance alarms caused by normal off-gassing.

For detailed product specifications, visit the [PureAir O₂ Deficiency \(Depletion\) Monitor product page](https://www.pureairemonitoring.com/all-categories-gas-monitorsair-check-o2-oxygen-deficiency-monitor-for-co2-n2-storage-areas/). (<https://www.pureairemonitoring.com/all-categories-gas-monitorsair-check-o2-oxygen-deficiency-monitor-for-co2-n2-storage-areas/>)

An annotated photo illustrating the proper wall-mounted installation of the PureAir sensor is shown below:



Annotations

- ① Signage provided by EH&S, posted at monitor location.
- ② Oxygen monitor installed approximately 5' above the finished floor.
- ③ Monitor is plugged into a standard electrical receptacle (wall outlet).