Compressed Gas Cylinder Storage

Cylinders of compressed gases shall be stored in areas where they are protected from external heat sources such as flame impingement, intense radiant heat, electric arc, or high-temperature steam lines.

8 CCR 4650(a)

Inside of buildings, cylinders shall be stored in a well-protected, well-ventilated, dry location, and flammable gas cylinders shall be at least 20 feet from highly combustible materials.

8 CCR 4650(b)
CGA P-1 3.7 & 4.2.2

The heating of flammable gas storage areas shall be indirectly heated, such as by air, steam, hot water, etc.

UC Practice

Cylinders are not permitted in unventilated enclosures such as lockers and cupboards.

8 CCR 4650(c)

Adequate space shall be made available for the segregation of gases by hazard class. Flammable gases shall not be stored with oxidizing agents. Separate storage for full or empty cylinders is preferred. Such enclosures shall serve no other purpose.

Cylinders containing strong oxidizers, such as oxygen, nitrous oxide, etc., shall not be stored near flammable gases or other combustible materials. Oxidizing gases shall be stored at a minimum distance of 20 feet from highly combustible materials, or a noncombustible barrier that is at least 5 feet high and fire-resistant. Valves, pipe fittings, regulators, and other equipment shall be constructed of material and pressure rating that is also compatible with oxygen. Code
requires that only noncombustible barriers be used.

8 CCR 4650(d)
CGA P-1 3.7.2
24 CCR 9 (CFC), Section 8001.11.8

Liquefied fuel-gas cylinders shall be stored/transported in an upright position so that the safety relief device is in direct contact with the vapor space in the cylinder at all times.

8 CCR 4650(e)

When toxic or highly toxic flammable gases are stored in rooms outside of gas cabinets or exhausted enclosures, the storage rooms shall be provided with explosion control.

UC Practice
24 CCR 9 (CFC), Section 8003.1.7
Required for H-6 occupancies

When separate gas storage rooms are provided, they shall operate at a negative pressure in relation to the surrounding area, and direct the exhaust ventilation to the fume exhaust system, assuring that incompatible gases are not mixed in the ductwork.

UC Practice
24 CCR 9, Section 8003.3.1.3.4
Required for H-6 occupancies

Storage areas shall be secured against unauthorized entry.

UC Practice
24 CCR 9 (CFC), Section 7401.6.1
Required for H-6 occupancies

The storage of compressed gas cylinders shall not obstruct exits or routes of egress. Also, compressed gas cylinders shall not be stored near elevators, walkways, platform edges, or in locations where heavy moving objects may strike or fall upon them.

CGA P-1 3.7.2, & 3.7.3
24 CCR, Part 2, Title 19

Emergency power shall be provided for exhaust ventilation, gas-detection systems, emergency alarm systems, and temperature control systems.

UC Practice
24 CCR 9 (CFC), Section 8003.3.1.4
Required for H-6 occupancies