

INFORMATION BULLETIN

MEDICAL GAS INSTALLATION

Code Reference:

California Building Code (CBC), 2001 Edition, Section 410

California Fire Code (CFC), 2001 Edition, Articles 74 and 80

National Fire Protection Association (NFPA) Standards 99

1. Gas containers, cylinders, tanks and systems shall be marked according to National Standard CFC, Section 7401.5.
2. Pipelines shall be seamless Type "L" or "K" copper tubing, hard temper for exposed locations and soft temper for concealed locations. All materials shall be prepared for oxygen service. Copper tubing shall be of 3/8" outer diameter.
3. Pipelines exposed to possible damage shall be protected in conduit (CFC 7401.6.3).
4. All piping shall be marked for identification at 20-foot intervals (CFC 7901.5.3).
5. All fittings shall be braised with silver braising alloy at 1000°F.
6. Storage room will be a minimum of 1-hour fire resistive construction (CFC 7404.2.1.2).
7. Electrical wall fixtures shall not be installed less than 5 feet above the floor in storage rooms (NFPA 99 4-5.1.1.2).
8. System lines shall be blown clear by means of oil free dry nitrogen and cross connection checked (NFPA 99 4-5.4.1.2).
9. System shall be pressurized to 150 PSI and joints checked by installer with approved lead detector during first piping process.
10. System shall be pressurized to 150 PSI for 24 hours and joints checked by installer with inspection and approval of Fire Department.

11. Pipelines shall be purged of test gas with nitrous oxide/oxygen before use.
12. Each cylinder shall be provided with pressure reducing regulator to code.
13. Cylinder shall be securely fastened to a supporting wall, with chains at two points on the bottles.
14. 'NO SMOKING" and "OXIDIZER" signs shall be posted in cylinder storage area.
15. NFPA 704 M Labeling is required for the Medical Gas Room on the outside door.
16. Safety relief valves set at 75 PSI shall be installed in the main line with installation of related cylinder manifold equipment. See Redding Fire Department for the size and location requirements.
17. Adequate ventilation will be in accordance with CFC, Article 74.
18. Valves, regulators, manifolds, or pigtails must conform to current NFPA, CFC, and CBC Standards.
19. Certification of the tests, piping and adherence to these requirements will be required at the final inspection (NFPA 99 4-5.4.1.3).
20. Containers of medical gases shall be provided with at least one fire sprinkler to provide container cooling in case of fire (CFC 7404.2.1.2 / CFC 7404.2.1.3).
21. Medical Gas installations require a permit from the Fire Department. Apply for this permit at the City Hall Permit Center, 777 Cypress Avenue, Redding, CA. 96001.

**There is a permit fee to process this application and inspect the installation.*