

**1307.0 Vapor Vents and Stacks for Sterilizers.**

**1307.1 General.** When a sterilizer has provision for a vapor vent and such a vent is required by the manufacturer, the vent shall be extended to the outdoors above the roof. Sterilizer vapor vents shall be installed in accordance with the manufacturer's instructions and shall not be connected to any drainage system vent.

**1308.0 Aspirators.**

**1308.1** (See Section 603.4.9, Water Inlets to Water Supplied Aspirators.) Provisions for aspirators or other water-supplied suction devices shall be installed only with the specific approval of the Authority Having Jurisdiction. Where aspirators are used for removing body fluids, they shall include a collection container to collect liquids and solid particles. Aspirators shall indirectly discharge to the sanitary drainage system through an airgap in accordance with Chapter 8. The potable water supply to an aspirator shall be protected by a vacuum breaker or equivalent backflow protection device in accordance with Section 603.4.9.

**Part II****Medical Gas and Vacuum Systems.****1309.0 Application.**

**1309.1** The provisions herein shall apply to the installation, testing, and verification of medical gas and vacuum piping in hospitals, clinics, and other health care facilities.

**1309.2** The purpose of this chapter is to provide requirements for the installation, testing, and verification of medical gas and medical vacuum systems, from the central supply system to the station outlets or inlets.

**1309.3** Wherever the terms "medical gas" or "vacuum" occur, the provisions shall apply to piped systems for oxygen, nitrous oxide, medical air, carbon dioxide, helium, medical-surgical vacuum, waste anesthetic gas disposal, and mixtures thereof. Whenever the name of a specific gas or vacuum service occurs, the provision shall apply only to that gas. [NFPA 99:5.1.1.2]

**1309.4** This chapter does not apply to portable compressed gas systems.

**1309.5** This chapter does not apply to:

- (1) Cylinder and container management, storage, and reserve requirements.
- (2) Gas central supply and bulk supply systems, except as addressed in this chapter.
- (3) Electrical connections and requirements.

- (4) Motor requirements and controls.
- (5) Systems having nonstandard operating pressures, except as addressed in this chapter.
- (6) Waste Anesthetic Gas Disposal (WAGD) systems.
- (7) Surface-mounted medical gas rail systems.

**1309.6** The requirements of this chapter shall not be interpreted to conflict with the requirements of NFPA 99, *Standard for Health Care Facilities* or equivalent International Standard(s) approved by the Authority Having Jurisdiction. For requirements of portions of medical gas and medical vacuum systems not addressed in this chapter or medical gas and medical vacuum systems beyond the scope of this chapter refer to NFPA 99, *Standard for Health Care Facilities* or equivalent International Standard(s) approved by the Authority Having Jurisdiction.

**1309.7** An existing system that is not in strict compliance with the provisions of the standard (Code) shall be permitted to be continued in use as long as the Authority Having Jurisdiction has determined that such use does not constitute a distinct hazard to life. [NFPA 99:5.1.1.4]

**1310.0 General Requirements.**

**1310.1 Oxygen Compatibility.** Tubes, valves, fittings, station outlets, and other piping components in medical gas systems shall have been cleaned for oxygen service by the manufacturer, prior to installation in accordance with CGA G-4.1, *Cleaning Equipment for Oxygen Service*, or equivalent International Standard(s) approved by the Authority Having Jurisdiction except that fittings shall be permitted to be cleaned by a supplier or agency other than the manufacturer. [NFPA 99:5.1.10.1.1]

**1310.1.1** Components include but are not limited to containers, valves, valve seats, lubricants, fittings, gaskets, and interconnecting equipment including hose. Easily ignitable materials should be avoided.

Compatibility involves both combustibility and ease of ignition. Materials that burn in air will burn violently in pure oxygen at normal pressure and explosively in pressurized oxygen. Also, many materials that do not burn in air will do so in pure oxygen, particularly under pressure. Metals for containers and piping have to be carefully selected, depending on service conditions. The various steels are acceptable for many applications, but some service conditions can call for other materials (usually copper or its alloys) because of their greater resistance to ignition and lower rate of combustion. Similarly, materials that can be ignited in air have lower ignition