

**WAC 296-307-48033 How must service piping systems be designed?**

(1) Piping and fittings must comply with Section 2, Industrial Gas and Air Piping Systems, of the American National Standard Code for Pressure Piping, ANSI B 31.1-1967, if they do not conflict with subsections (2) and (3) of this section.

(2) Pipe must be at least Schedule 40 and fittings must be at least standard weight in sizes up to and including 6-inch nominal.

(3) Copper tubing must be Types K or L according to the Standard Specification for Seamless Copper Water Tube, ASTM B88-66a.

(4) Piping must be steel, wrought iron, brass or copper pipe, or seamless copper, brass or stainless steel tubing, except as provided in subsections (5) through (9) of this section.

(5) Oxygen piping and fittings at pressures in excess of 700 psig, must be stainless steel or copper alloys.

(6) Hose connections and hose complying with WAC 296-307-48051 may be used to connect the outlet of a manifold pressure regulator to piping if the working pressure of the piping is 250 psig or less and the length of the hose is a maximum of 5 feet. Hose must have a minimum bursting pressure of 1,000 psig.

(7) When oxygen is supplied to a service piping system from a low-pressure oxygen manifold without an intervening pressure regulating device, the piping system must have a minimum design pressure of 250 psig. A pressure regulating device must be used at each station outlet when the connected equipment is for use at pressures less than 250 psig.

(8) Piping for acetylene or acetylenic compounds must be steel or wrought iron.

(9) Unalloyed copper must only be used for acetylene or acetylenic compounds in listed equipment.

[Statutory Authority: RCW 49.17.040. WSR 98-24-096, § 296-307-48033, filed 12/1/98, effective 3/1/99. WSR 97-09-013, recodified as § 296-307-48033, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. WSR 96-22-048, § 296-306A-48033, filed 10/31/96, effective 12/1/96.]