1210.3.3 Piping in Partitions. Concealed gas piping shall not be located in solid partitions. [NFPA 54:7.3.3]

1210.3.4 Tubing in Partitions. This provision shall not apply to tubing that pierces walls, floors, partitions, to tubing installed vertically and horizontally inside hollow walls or partitions without protection along its entire concealed length where both of the following requirements are met [NFPA 54:7.3.4]:

(1) A steel striker barrier not less than 1mm (0.0508 in.) thick, or equivalent, is installed between the tubing and the finished wall and extends not less than 100mm (4 in.) beyond concealed penetrations of plates, fire stops and, wall studs.

(2) The tubing is installed in single runs and is not rigidly secured.

1210.3.5 Piping in Floors. In industrial occupancies, gas piping in solid floors such as concrete shall be laid in channels in the floor and covered to permit access to the piping with minimum damage to the building. Where piping in floor channels could be exposed to excessive moisture or corrosive substances, the piping shall be protected in an approved manner. [NFPA 54:7.3.5.1]

Exception: In other than industrial occupancies and where approved by the Authority Having Jurisdiction, gas piping embedded in concrete floor slabs constructed with portland cement shall be surrounded with not less than 40mm (1-1/2 in.) of concrete and shall not be in physical contact with other metallic structures such as reinforcing rods or electrically neutral conductors. Piping, fittings, and risers shall be protected against corrosion in accordance with Section 1208.5.6. Piping shall not be embedded in concrete slabs containing quick-set additives or cinder aggregate. [NFPA 54:7.3.5.2]

1210.4 Piping in Vertical Chases. (See Section 1202.0.) Where gas piping exceeding 35kPa (5 psi) is located within vertical chases in accordance with Section 1210.5, the requirements of Sections 1210.5.1 through 1210.5.4 shall apply. [NFPA 54:7.4]

1210.5 Maximum Design Operating Pressure. The maximum design operating pressure for piping systems located inside buildings shall not exceed 35kPa (5 psi) unless one or more of the following conditions are met [NFPA 54-09:5.5.1]:

(1) The piping system is welded.

(2) The piping is located in a ventilated chase or otherwise enclosed for protection against accidental gas accumulation.

(3) The piping is located inside buildings or separate areas of buildings used exclusively for one of the following:

(a) Industrial processing or heating

(b) Research

(c) Warehousing

(d) Boiler or mechanical equipment rooms

(4) The piping is a temporary installation for buildings under construction.

(5) The piping serves appliances or equipment used for agricultural purposes.

1210.5.1 Pressure Reduction. (See Section 1202.0.) Where pressure reduction is required in branch connections for compliance with Section 1210.5, such reduction shall take place either inside the chase or immediately adjacent to the outside wall of the chase. Regulator venting and downstream overpressure protection shall comply with Section 1208.7.4. The regulator shall be accessible for service and repair and vented in accordance with one of the following [NFPA 54:7.4.1]:

(1) Where the fuel gas is lighter than air, regulators equipped with a vent-limiting means shall be permitted to be vented into the chase. Regulators not equipped with a vent-limiting means shall be permitted to be vented either directly to the outdoors or to a point within the top 30cm (1 ft.) of the chase.

(2) Where the fuel gas is heavier than air, the regulator vent shall be vented only directly to the outdoors.

1210.5.2 Liquefied Petroleum Gas Systems. The maximum operating pressure of LP-Gas piping systems shall be:

(1) In accordance with Section 1210.5.1;

(2) In accordance with NFPA 58, where the pressure exceeds 1.4bar (20 psi) and;

(3) Designed to either accommodate liquid LP-Gas or prevent LP-Gas vapor from condensing back into a liquid in buildings having systems designed to operate below -21°C (-5°F) or with butane or a propane-butane mix.

1210.5.3 Construction. Chase construction shall comply with local building codes with respect to fire resistance and protection of horizontal and vertical openings. [NFPA 54:7.4.2]

1210.5.4 Ventilation. A chase shall be ventilated to the outdoors and only at the top. The openings shall have a minimum free area (in mm^2 [in.])