



RESIDENTIAL GAS PIPING

These requirements apply to building permits submitted on or after January 1, 2017.

BUILDING INSPECTION REQUIREMENTS

A plumbing permit is required to replace, add or extend any gas piping. Permits are required prior to installation or replacement of gas piping.

Following is a listing of the general requirements for gas piping based on the 2016 California Plumbing Code. This brochure is intended to provide general information, contact the Building Inspection Division for any questions or additional information.

Gas Pipe Sizing (CPC 1208.4)

If extending or tapping off of an existing gas line, sizing calculations shall be completed to ensure the gas piping is adequate to serve all existing and new appliances. Provide a diagram that shows the type of material used, size, location, and length of run of the existing and proposed gas lines, and the location and BTUs of all appliances served. Building Inspection staff can assist in completing the necessary calculations.

Pipe Materials (CPC 1208.5)

Gas pipe material is allowed as follows:

GAS PIPE ALLOWABLE MATERIALS		
Pipe Material	Indoor Installation	Outdoor, Above Ground Installation
Galvanized Wrought Iron	Yes	Yes
Galvanized Steel	Yes	Yes
Black Steel	Yes	No
Corrugated Stainless Steel Tubing	Yes	Yes

The installer must be certified by the manufacturer to install such material.

Underground Installation (CPC 1210.1)

Gas piping installed underground shall be a minimum of 12" in depth, 18" where external damage could occur. Underground gas piping shall be factory-coated material listed for underground gas line installation and installed in accordance with the manufacturer's requirements (or as approved by the Building Division). Fittings may be wrapped in the field with an approved material. When using non-metallic pipe, an electrically continuous corrosion-resistant tracer wire (minimum AWG 14) or tape shall be buried with the piping. One end of the tracer wire shall continue above ground, attached to a building wall or the riser.

Underground Beneath Buildings (1210.1.6)

Gas piping shall be sleeved and vented in accordance with the California Plumbing Code. Please contact the Building Division for more information.

Piping Unions (CPC 1210.3, 1212.5)

Unions (inline couplings) are only permitted downstream (after) appliance shut-off valves, meter locations, and immediately downstream on building shut-off valves. The use of right/left couplings and nipples are required in all other locations. Unions shall not be installed in a concealed location.

Shut-Off Valves (CPC 1212.5)

Shut-off valves are required ahead of all gas appliances. Valves must remain accessible from the same room as the appliance served, and shall be within 6 feet of the appliance.

Pipe Support (CPC 1210.2.4)

Pipes shall be supported as follows:

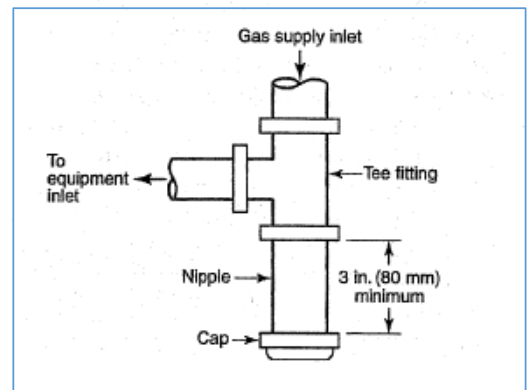
GAS PIPE SUPPORT REQUIREMENTS (CPC Table 1210.2.4.1)	
Size of Pipe	Pipe Support Distance (maximum)
1/2" Tubing	4 feet
1/2" Steel Pipe 5/8" or 3/4" Tubing	6 feet
3/4" to 1" Steel Pipe 7/8" or 1" (Horizontal) Tubing	8 feet
1-1/4" or larger (Horizontal) Steel Pipe	10 feet
1-1/4" or larger (Vertical) Steel Pipe 1" or Larger (Vertical) Tubing	Every Floor

Sediment Trap (CPC 1212.8)

A sediment trap is required at each water heater, boiler, and furnace, downstream of the appliance shut-off valve and as close to inlet of the equipment as practical.

Pressure Test Inspection (CPC 318.0, 1213.3)

Test pressure shall be no less than 1-1/2 times the proposed maximum working pressure, but not less than 10 psi. The test duration shall be a minimum of 15 minutes. Test gauges have a scale not greater than twice times the test pressure shall be 0.10 psi increments.



PERMIT PROCESS

Building Permit Review

- Building permits for gas piping replacement are available on-line at www.cccounty.us/apc or at the Application and Permit Center.

Inspections

- Two inspections are required; a rough plumbing and a final.
 - The rough plumbing inspection should be scheduled when the new gas lines are installed, before walls are covered, and before the connection is made to the gas service. A pressure test inspection will be done and all testing equipment is to be provided by the permittee. (CPC 1213.3)
 - The final inspection should be scheduled after all the work has been completed.

Building Permit Application Requirements

- A completed Building Permit Application.

Contra Costa County Department of Conservation and Development

Application and Permit Center-30 Muir Rd., Martinez, CA 94553 - 925-674-7200, FAX 925-674-7244

Building and Planning Staff are available 8:00 a.m. to 5:00 p.m. Monday thru Thursday and 7:30 a.m. to 4:00 p.m. on Friday
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