

**DEVELOPMENT SERVICES – BUILDING INSPECTION****INSPECTION GUIDELINES:
WHOLE HOUSE GAS TEST****INSPECTION CODE: 222****SCOPE: RESIDENTIAL AND COMMERCIAL****APPLICABLE CODES:** 2019 CBC, CRC, CPC, CMC, CEC, CALGreen, CEnC, and PAMC

The information provided in this document is general and intended as a guide only. Each project is unique and additional requirements may be enforced as deemed appropriate.

IMPORTANT

- Failure to complete the items below prior to inspection may result in a re-inspection fee.

PRE INSPECTION**PRIOR TO CPA INSPECTION**

- Turn off or cap all outlets before charging gas line with air including all shutoff valves connected to appliances. (CPC 1213.2.3)
- Prior to inspection the permit holder or contractor shall test the system for leaks.

OTHER GAS PIPING CHECKLIST

- See [“Under Structure Gas Pipe”](#) and [“Joint Trench”](#) Checklists.

INSPECTION**GENERAL REQUIREMENTS**

- A whole house gas test is required upon the installation, alteration, or repair of any gas piping. (CPC 1213.1)
- Test Pressure: 10 PSI on a 15 PSI gauge for 15 minutes. (CPC 1213.3)
- For welded piping, and for piping carrying gas at pressures in excess of 14” water column pressure, the test pressure shall be not less than 60 psi and shall be continued for 24 hours. (CPC 1213.3)
- Test Gauges shall have a pressure range of not greater than twice the test pressure applied (CPC 318.5)
 - Required pressure tests of 10 psi or less shall be performed with gauges of 0.10 psi incrimination or less. (CPC 318.2)
 - Required pressure tests exceeding 10 psi but less than or equal to 100 psi shall be performed with gauges of 1 psi incrimination or less. (CPC318.3)

- Gas meter at curb box: Gas test from meter through entire system.
- Clearances: Verify meter is located in accordance with utility and CPC standards/requirements. Proper distance from electric meters, vents, and operable windows.
- Verify that the size of the meter is large enough for the demand.
- Verify proper gas sizing per CPC Table 1215.2. (CPC 1208.4)
- Verify proper fittings and proper supporters per CPC Table 1210.2.4.1
- Gas piping is not allowed under slab or structure unless properly vented. See "[Under Slab/Structure Gas Piping](#)" requirements. (CPC 1210.1.6.1)
- Metal underground gas piping shall not be used as a grounding conductor or electrode. (CPC 1211.3)
- Corrugated stainless steel tubing (CSST) must be installed per manufacturer's installation instructions.
- Underground piping systems shall be installed with a minimum of 12" of cover. The minimum cover shall be increased to 18" if external damage to the pipe or tubing from external forces is likely to result. Where a minimum of 12" of cover cannot be provided, the pipe shall be installed in conduit or bridged (shielded). (CPC 1210.1.1)
- Underground piping shall comply with one or more of the following unless approved technical justification is provided to demonstrate that protection is unnecessary:
 - The piping shall be made of a corrosion-resistant material that is suitable for the environment in which it will be installed.
 - Pipe shall have a factory-applied, electrically insulating coating. Fittings and joints between sections of coated pipe shall be coated in accordance with the coating manufacturer's instructions.
 - The piping shall have a cathodic protection system installed, and the system shall be maintained in accordance with CPC Section 1210.1.3.3 or Section 1210.1.3.6. [NFPA 54:7.1.3.2]
- 1210.1.3.1 Zinc Coating Zinc coating (galvanizing) shall not be deemed adequate protection for underground gas piping. [NFPA 54:7.1.3.1] (CPC 1210.1.3.1)
- Plastic piping shall be installed outdoors, underground only. Plastic piping shall be permitted to terminate aboveground where an anodeless riser is used. (CPC 1210.1.7)
- An electrically continuous corrosion-resistant tracer shall be buried with the plastic pipe to facilitate locating minimum 14 AWG wire with one end brought above ground. (CPC 1210.1.7.2)
- During 15 minute pressure test the inspector shall verify that:
 - Equipment is properly installed for safe operation
 - Combusting air for gas appliances is supplied per CMC 701
 - Flues comply with CMC 801

- Equipment and gas piping seismically secured
- Working clearance is provided per CMC 304

- Plumbing contractor shall reconnect meter for use. The City of Palo Alto does not reconnect existing gas meter.

METER RELEASE

- If a meter release is required or if gas meter is being upgraded, see "[Gas Meter Release](#)" inspection checklist.
- Release Tag: Once gas test has passed and all requirements are met, CPA inspector shall attach gold sticker to gas stub out. (CPC 1304.2)
- Inspector shall submit gas release tag to Utilities for meter installation.

EARTHQUAKE SHUTOFF VALVE

- Valve shall be installed on the houseline side of the meter. Verify valve installed per manufacturer's installation instruction as installed in the correct orientation.
- Valve shall be listed by a recognized testing agency. (CPC 301.2)
- A Whole House Gas Test is required. Test Pressure: 10 PSI on a 15 PSI gage for 15 minutes. (CPC 1213.1)
- NOTE: Owner is responsible for resetting the valve when valve is activated by seismic or other event.