

Subject: NATURAL GAS SERVICE INSTALLATIONS

Natural Gas Installation Requirements

The customer's gas service installation will be constructed and maintained in accordance with the HPUC procedures and policies. The Code of Federal Regulations Part 192, & the Minnesota Uniform Mechanical Code are the accepted standards for all installations.

The customer will not utilize any apparatus or device that may adversely effect the natural gas service. The HPUC reserves the right to discontinue or withhold natural gas service to any installation failing to conform to these requirements.

Natural Gas Service Line Ditches

Natural gas service line ditches will not be used for the installation of electric, telephone, sewer, or water services unless previously approved by the HPUC. There must be at least 12 inches vertical and horizontal separation between underground services. Depth of natural gas lines must be at least 18 inches under the surface.

Natural Gas Service Size

The HPUC will determine the sizes of residential, commercial, and industrial natural gas services on the basis of governing codes, rules, and regulations. Sizes include low pressure, medium pressure (up to 10 PSIG), and high pressure (10 to 50 PSIG).

Natural Gas Piping

The customer's piping is to be done by a qualified licensed plumber or qualified natural gas pipe fitter. Piping must be in accordance with the following regulations that ensure safe and satisfactory residential installation of natural gas pipe:

1. Pipe will be of ample size to carry the desired BTU load, preferable not to exceed a 0.3-inch drop in water pressure. The HPUC Gas Department will provide pipe-sizing information.
2. Pipe carrying natural gas to residential appliances will not be smaller than ½ inch in size. All gas piping will meet or exceed the standards of the Minnesota Uniform Mechanical Code.
3. Gas Piping and fittings will be clean and free of cutting burrs, defects in structure, or threading.
4. Every appliance will have an approved shut-off cock with a lever handle.
5. An approved union will be installed between the shut-off cock and appliance.

6. All gas pipe concealed with completely welded using either butt or socket weld fittings. All concealed construction will be inspected, tested, and approved before concealment.
7. All gas lines running under concrete slabs will be encased in steel or wrought iron casing. The casing will be sealed at each end and a suitable vent to the outdoor atmosphere provided in an accessible location.

Prohibited Fittings

1. The use of bushings is prohibited. Reducer fittings must be used.
2. The use of street elbows is prohibited.
3. Cast iron and compression fittings are prohibited.
4. Old pipe or galvanized pipe will not be used.
5. The use of pipe plugs is prohibited. Caps must be used at all times to terminate open pipes.
6. Tin straps, wires, and makeshift supports will not be used. Use only standard wire pipe hanger hooks, pipe straps, or straphanger iron.
7. Use only reliable standard ground joint unions.
8. Hose or flexible connections shall only be allowed in the vicinity of the appliance connection.
9. Cement or caulking is not allowed to repair faulty fitting work. All imperfect fittings must be replaced.
10. Use a few elbows and couplings as possible. Elbows and couplings that are not essential will be removed.

Testing of Pipes

All piping will be air tested before the natural gas is turned on. Natural gas piping will be tested under at least 25 pounds of air pressure for not less than 12 hours without loss of pressure, and soap tested at all joints. All appliances must be disconnected when testing as the usual stove cock will not stand this pressure. Appliances will be tested as provided for in the National Board of Fire Underwriters Code No. 54 and the Minnesota Uniform Mechanical Code, Chapter 1346.25.

Natural Gas Main Extensions

The HPUC is not required to make an extension from a natural gas main unless the present main has sufficient capacity to provide the additional gas service required by the extension, and the extension will not jeopardize gas service to the area currently being served by the main. Residential, commercial, and industrial extensions are subject to negotiation between the requesting party and the HPUC regarding the ability to provide service, cost of services, and facilities.

Approved Natural Gas Appliances

All appliances must be approved by the American Gas Association or the National Board of Fire Underwriters or the Minnesota Uniform Mechanical Code.

Space Heating

Contractors installing natural gas-fired services of any type are to notify the HPUC of the installation. An HPUC employee must conduct and pass service inspection before flowing natural gas to the system. The HPUC employee will verify the following:

1. For piping a lever handle cock will be installed in the drop pipe to the furnace or burner not less than 5 feet from the floor.
2. All electric wiring between the gas appliance and the building wiring will be installed by a licensed electrician and will conform to the HPUC procedures and regulations and to the National Electric Code of the National Board of Fire Underwriters.