

GAS PIPING GUIDELINES FOR HOMEOWNERS

As the owner-occupant of a detached single family dwelling, you are allowed to install fuel gas piping within your home. Such installations require permits and must pass all inspections. The following list of “dos and don’ts” are intended to help make the completed job easier, safe and code complying. These helpful comments do not preclude compliance with other significant aspects of the Dubuque Mechanical Code – Fuel Gas Piping requirements.

DO:

1. Use Schedule 40 black steel piping with malleable iron screwed fittings (no cast iron). Flexible Corrugated Stainless Steel Tubing (CSST) will also be allowed as per the manufacturer’s guidelines.
2. Use an approved pipe thread compound applied to the male threads only (keep at least 2 threads back from end of pipe).
3. Incorporate drip legs at all appliance connections. For mobile home gas piping, care must be exercised so that such drip legs are not located in a freezable area (any water vapor or condensate that may be entrained in the gas line will settle in such legs causing pipe or fittings to rupture if it freezes). Outside or unheated areas are prohibited locations for gas piping drip legs.
4. Incorporate an approved gas shut-off valve within three feet of the appliance served and a malleable ground joint union downstream of the valve to enable replacement of the appliance. In lieu of the ground joint union, an AGA approved flexible appliance connector may be used (flexible connector cannot penetrate appliance casing).
5. Double check your piping layout for proper sizing based on the Dubuque Mechanical Code pipe sizing method.
6. Provide an air test (at least 15 psi) on all newly installed piping. Test pressure must be maintained without loss of pressure for at least 15 minutes and observed by an inspector. (Gauge readout dial must not be more than 30 psi). If gas pressure is 2 pounds or higher, call Building Safety Department for test requirements.
7. Provide an approved mobile home flexible connector between service outlet and trailer when piping gas to a mobile home.

8. All gas piping systems are required to be bonded according to the National Electrical Code (NEC), National Fire Protection Association (NFPA) 70. See figure 1 and/or 2 below. Bond wire must be #6 or equivalent.

Figure 1 Bonding Clamp on Pre-Fabricated Meter Stub Out
(Remove any paint on pipe surface beneath clamp location)

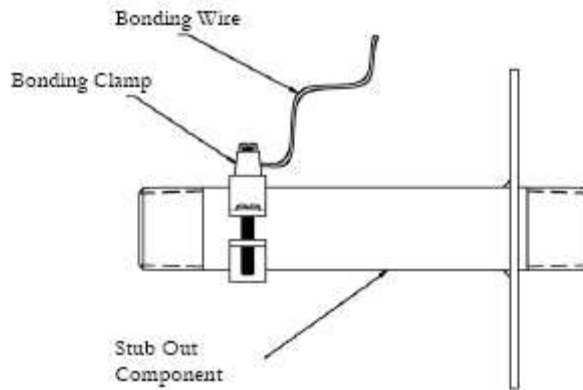
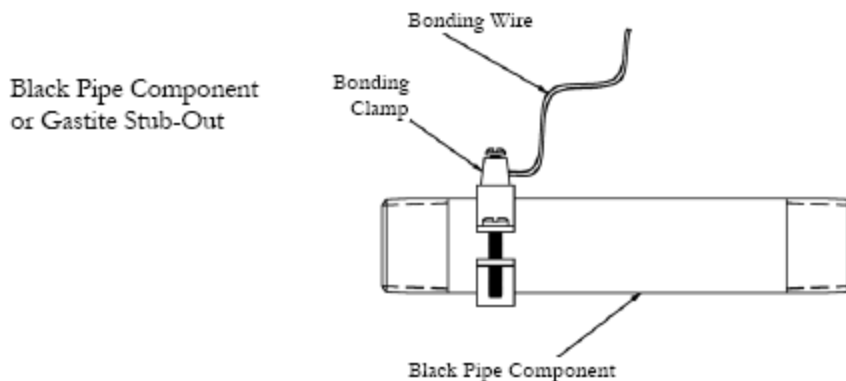


Figure 2 Bonding Clamp on Steel Pipe Segment
(Remove any paint or coating on pipe surface beneath clamp location)



9. Call the Building Safety Department at 589-4150 with any questions, when in doubt, or to set up an inspection.

DON'T

1. Run gas piping underground, under or embedded in concrete. If gas piping must be run underground, contact the Building Safety Department for code requirements and testing.
2. Incorporate ground joint unions anywhere in the piping system except at the appliance or at the meter connection.

3. Subject any appliance gas control valve, regulator valve or the gas meter to the system piping test pressure (such devices will be damaged if subjected to the required 15 psi test pressure).
4. Conceal any portion of the piping until an inspector has seen it.
5. Connect bond wire to any portion of CSST.

Bear in mind that the permit holder is solely responsible for the use of proper materials; correct pipe sizing; proper installation of equipment, piping, valves and controls; and pressure testing of the gas piping system as required by the Building Safety Department. By obtaining a permit, the permit holder is stating that he or she is competent and knowledgeable to the degree required. While the Building Safety Department will attempt to help you, we cannot design your installation. If you have any doubts, consult a qualified licensed installer.