

September, 2013  
ELECTRICAL SECTION

## ***BONDING OF GAS LINES***

BC Electrical Code rule 10-406(4) requires interior metal gas lines to be bonded. The increased use of soft copper tubing for interior gas lines has resulted in some practical problems for installers. The following should be considered when deciding on the location and method of bonding interior metal gas lines:

- Compression type bonding clamps on soft copper tubing are not permitted due to potential damage to lines.
- The bonding clamp should be accessible after completion of construction.
- Where bonding is done at locations outdoors, adequate precaution must be taken to limit potential corrosion of metal gas piping. In addition, only bonding clamps which are approved for exterior use will be accepted.
- Each gas meter incorporates an **isolation coupling**, therefore the bonding conductor must be attached downstream of the meter whether the utility service is steel or plastic and must not interfere with the ability to perform meter maintenance.
- In multi-unit buildings, a bonding connection should be made to each unit's gas line.
- To ensure a good connection, the bonding conductor must be permanently attached and connected to steel piping only. For a combination steel/copper house line connection, the bonding should be installed on the steel piping as far from the meter connection as possible. Where a copper gas line is used, it may be necessary to make this connection at a suitable steel fitting located at an appliance.

*In most gas installations using soft copper, a steel "manifold" is provided at the boiler / furnace room. Bonding at this point is encouraged. The problems noted above are eliminated and Code requirements can be assured.*

