





## **Builder's Technical Bulletin**

Meter Connections to Flexible Supply Piping







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In some cases, installers of gas piping are using flexible metallic tubing such as corrugated stainless steel tubing (CSST) or copper tubing for outside piping applications where the tubing is being directly connected to the gas meter.

Based on clause 6.14.8 in the B149.1-10 Natural Gas and Propane Installation Code, CSST and copper tubing cannot be used to connect directly to a meter unless the meter is independently supported. Further to this, CSA Z662-11 also prohibits the connection of flexible piping and tubing systems to gas meters.

The Enbridge meter set design relies in part on support from the downstream/house piping. Flexible piping systems attached directly to the meter do not provide adequate support.

As a result of this change to the Code, Enbridge no longer approves connecting CSST or copper tubing directly to the meter, except when connecting to a rigid manifold used in multi-family buildings, and except in meter box applications, where CSST (but not copper tubing) connecting directly to the meter continues to be acceptable.

When using flexible tubing, the preferred method of installation is to run rigid piping through the building wall and then transition to CSST or copper tubing inside the premise, although it is recognized that in some cases this is not a viable option.

In order to allow the HVAC community to continue to use flexible tubing while still providing adequate support to Enbridge meters, the following criteria must be used in order for Enbridge to accept the installation:

- If the entry point to the building is within 0.3m (1ft.) of the meter outlet or does not allow for black iron piping to be run parallel to the wall to accommodate steel supports.
- a) The installer must use a manufacturer approved termination flange at the wall penetration.
  Connections from the meter outlet to the termination



flange must be completed using black iron pipe and fittings (See Figure 1).

b) The installer may also choose to run black iron piping through the wall, then transition to flexible tubing inside the building.

These techniques will provide adequate support for the meter without the requirement of piping supports.

- 2) If the entry point to the building is greater than 0.3m (1ft.) from the meter and requires piping to be run adjacent to the building,
- a) There shall be a minimum of 0.6m (2ft.) of black iron piping from the meter outlet before transitioning to flexible tubing. The piping shall be adequately supported to the wall to prevent stress on the meter and/or transition fitting.
- b) It is recommended that a minimum of 2 steel supports (not metal strapping) be used. This will prevent sagging or twisting of the piping when pressure is applied to the meter set.
- 3) All installations must conform to B149.1-10 Natural Gas and Propane Installation Code and tubing manufacturer's certified installation instructions. Electrical bonding of the CSST system must be provided according to manufacturer's certified installation instructions and shall not be attached to the outlet tailpiece of the meter in any case.

In Quebec, installations of flexible piping must be in accordance with practices accepted by the Régie du bâtiment du Québec.

Questions can be directed to Enbridge at **1-877-ENBRIDGE (1-877-362-7434)**. The question will be directed to a technical representative who will return your call.

