

**PROTECTION of GAS PIPING and TUBING SYSTEMS**

**Subject: DAMAGE DUE TO STRAIN from BUILDING SETTLEMENT**

This bulletin has been jointly developed by Safety Services and the Gas Technical Council to inform the gas industry of the requirements in the **Natural Gas and Propane Installation Code CAN/CSA-B149.1**, associated with the protection of gas piping and tubing systems.

**Designers, Installers and Safety Codes Officers** are reminded to establish a means of protection to reduce the probability of damage or breakage of the gas piping or tubing systems in wood framed multi-storey buildings. The settling or shrinkage of building framing that is **not** accounted for could lead to leakage and/or breakage of the gas piping or tubing systems. The escape of gas into the building could result in a potential hazard or may directly cause hazards, such as a fire or an explosion.

The design and installation of every gas system shall include a means to accommodate for building settlement so as to protect the piping or tubing from damage in accordance with **Clause 6.16.3** of the Natural Gas and Propane Installation Code.

The designer and/or installer shall confirm the settlement rates for the construction materials in accordance with good engineering practice and establish a means by which the piping and tubing are to be protected against damage or breakage due to strain. In addition, experience has shown that shrinkage can be as much as  $\frac{3}{4}$  of an inch per floor depending on the moisture content and height of the wood framing.

Installers are reminder that **Clause 6.14.4** prohibits any combination of fittings designed and intended to act as a swing joint from being concealed. In addition, any piping or tubing that contains fittings or joints **shall not be concealed** prior to being inspected and tested in accordance with **Clause 6.22**.

The purpose of this notice is to clarify responsibilities under the **Safety Codes Act**. The Designers and Installers shall ensure that the design and installation of gas piping or tubing systems in all buildings complies with the *Act* and in accordance with the regulations.



Issue of this STANDATA is authorized by  
the Administrator

A handwritten signature in black ink, appearing to read "Carey LaRose".

Carey LaRose



SAFETY CODES COUNCIL