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From: Titeflex Corporation
Manufacturer of Gastite® Flexible Gas Piping

Date: July 19, 2007

9/1183 **********AUTO**ALL FOR AADC 144
Scott Zarnstorff
Village of Brockport
49 State St
Brockport NY 14420-1921

Re: Gastite Technical Bulletin TB2007-01, 01-26-07
Electrical Bonding of Gastite Corrugated Stainless Steel Tubing (CSST)

Titeflex (Gastite) has been working with many organizations within the model code, natural/LP gas, construction, and regulatory communities to resolve installation issues affecting the electrical bonding of CSST systems. As a result, Gastite has incorporated the technical concerns and the code requirements involved with the bonding of CSST to the electrical grounding system into its Technical Bulletin. The updated bulletin describes the direct-bonding requirement for our piping system and we are asking for your support in adopting it. Our direct-bonding requirement is intended to provide a higher level of consumer protection against events that could energize any of the metallic pathways to ground installed within the home, including the CSST gas piping system.

Gastite's updated direct-bonding requirements will improve the level of consumer safety, are cost effective and are simple to understand and install. This simplified direct-bonding approach requires the following three steps:

- All CSST systems must be bonded directly to one of the grounding electrodes or to the grounding electrode conductor.
- The bonding shall require the use of a No. 6 AWG copper wire for all residential installations. Commercial applications should be handled as an engineered approach.
- The point of attachment shall be a CSST fitting or steel pipe component of the system and not directly to the CSST itself.

The attached Technical Bulletin provides the detailed requirements for bonding Gastite CSST systems. Most states and municipalities already require or allow this bonding methodology. Minnesota is the most recent state to require this practice, adopting the attached direct bonding requirement in January 2007. We are currently in discussions with state and national code organizations and believe that all residential fuel gas systems will be bonded in this manner in the future.

Gastite has already initiated a program to convey this requirement across North America, and will continue to provide technical support, training for inspectors and installers, and educational materials to appropriate organizations. We are leading a national effort to update all of the pertinent model codes within the shortest time frame consistent with the code change cycles.

Gastite will provide assistance to each and every state and/or jurisdiction that wishes to adopt either a statewide amendment or local code change. For further information or training assistance on direct bonding of CSST systems please contact Gastite Engineering (800) 662-0208 or e-mail gastite@titeflex.com.

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Technical Bulletin #TB2007-01 01-26-07

Electrical Bonding of Gastite® CSST

January 26, 2007

This Technical Bulletin provides requirements for the direct bonding of Gastite® CSST. These requirements supersede any prior documents and are mandatory manufacturer's instructions until such time as requirements are adopted by the appropriate national/state model codes and direct bonding installation instructions are specified therein. This document replaces Technical Bulletin TB2006-04 and Section 4.10 Electrical Bonding/Grounding of the November 2006 Gastite Design & Installation Guide. This Technical Bulletin is effective for all Gastite® CSST installed from this date forward.

Direct bonding of Gastite® CSST is required for all gas-piping systems incorporating Gastite® CSST whether or not the connected gas equipment is electrically powered. This requirement is provided as part of the manufacturer's instruction for single-family and multi-family buildings. Bonding for commercial applications should be designed by engineers knowledgeable in electrical system design and the local electrical code.

Gastite® CSST installed inside or attached to a building or structure shall be electrically continuous and direct bonded to an effective ground-fault current path. The gas piping system shall be considered to be direct bonded when installed in accordance with the following:

The piping is permanently and directly connected to the electrical service equipment enclosure, the grounded conductor at the electrical service, the grounding electrode conductor (where of sufficient size) or to one or more of the grounding electrodes used. A single bond shall be made at or near the service entrance of the structure or the gas meter of each individual housing unit within a multi-family structure. The bonding conductor shall be 6 AWG copper wire. Bonding jumpers shall be attached in an approved manner in accordance with NEC-2005 Article 250.70 and the point of attachment for the bonding jumper shall be accessible. Bonding/grounding clamps listed to UL 467 comply with this requirement. This bond is in addition to any other bonding requirements as specified by local codes.

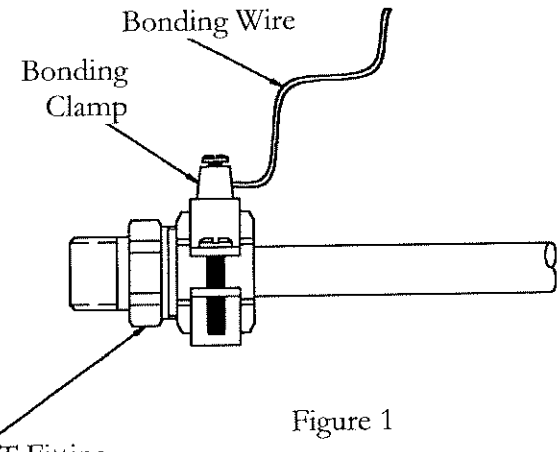

Figure 1

For attachment to the CSST gas piping system, a single bonding clamp must be attached to either a Gastite® brass fitting, a steel manifold or to any rigid pipe component. The corrugated stainless steel tubing portion of the gas piping system shall not be used as the point of attachment of the bonding conductor at any location along its length under any circumstances. See Figures 1, 2 and 3.

Proper bonding and grounding may reduce the risk of damage and fire from a lightning strike. Lightning is a highly destructive force. Even a nearby lightning strike that does not strike a structure directly can cause systems in the structure to become energized. If the systems are not properly bonded, the differences in potential between the systems may cause the charge to arc to another system. Arcing can cause damage to CSST. Bonding and grounding as set forth above should reduce the risk of arcing and related damage.

Depending upon conditions specific to the location of the structure in which the Gastite system is being installed, including but not limited to whether the area is prone to lightning, the owner of the structure should consider whether a lightning protection system is necessary or appropriate. Lightning protection systems are beyond the scope of this manual, but are covered by NFPA 780, the Standard for the Installation of Lightning Protection Systems, and other standards.

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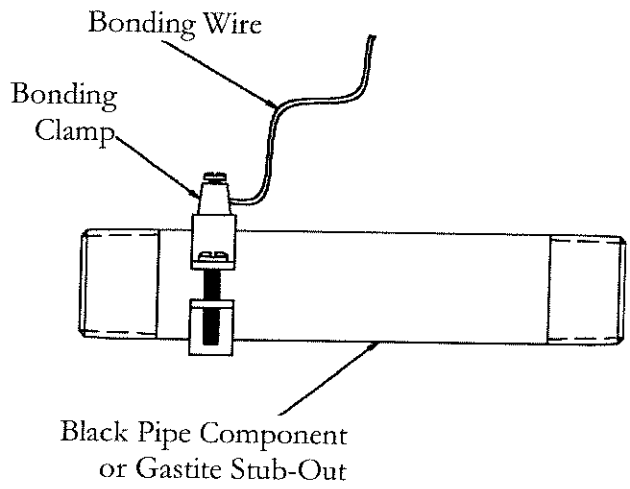

Figure 2

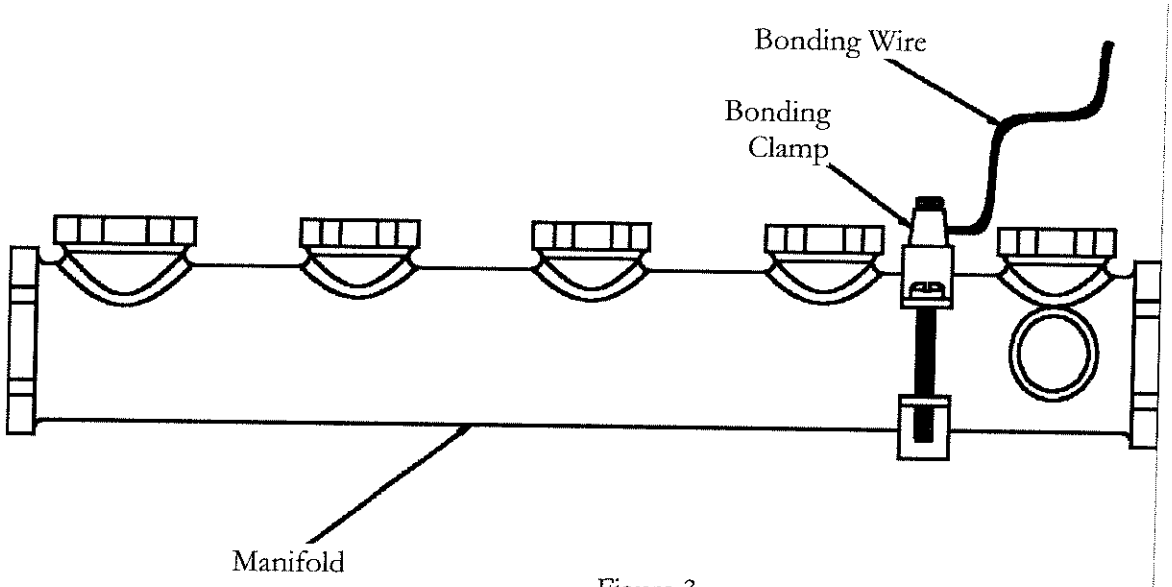

Figure 3