

Technical Bulletin #TB2014-01

Electrical Bonding of Gastite[®] CSST

For Canada use, Sep. 23, 2014

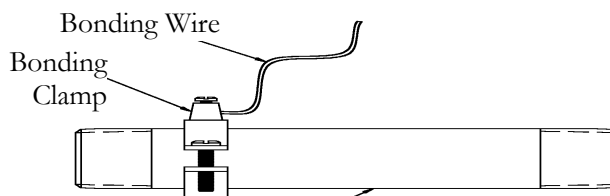
For U.S. use, Jan 1, 2015

This Technical Bulletin provides requirements for the direct bonding of Gastite[®] yellow CSST. This document updates section 4.10.b. *Electrical Bonding of Gastite CSST*, in the January 2013 Gastite Design & Installation Guide, based on updates to 2015 NFPA 54 sec. 7.13.2, and 2015 IFGC sec. 310.1.1.

Direct bonding of Gastite yellow CSST is required for all gas-piping systems incorporating Gastite CSST whether or not the connected gas equipment is electrically powered. This requirement is for single-family and multi-family buildings. A person knowledgeable in electrical system design, the local electrical code and these requirements should specify the bonding for commercial applications.

Gastite yellow CSST installed inside or attached to a building shall be electrically continuous and direct bonded to the electrical ground system of the structure in which it is installed. The gas piping system shall be considered to be direct-bonded when installed in accordance with the following.

- A single bond clamp attachment to rigid pipe or rigid component at any point within the gas piping system
 - Bond clamp attachment downstream of individual gas meter or 2nd stage regulator for propane systems, and in accessible location
 - Metallic contact is required (remove paint or plating on steel pipe)
 - Bonding clamp listed to UL 467



Bond clamp to rigid pipe or rigid component. (Do not attach clamp to CSST)
For clamp to a Gastite brass fitting hex: must be Erico p/n: CWP-size-JSH

- Bonding conductor is #6 AWG copper (minimum) or equivalent, and not exceeding 75 feet in length
 - The shortest practical bond wire length will improve the effectiveness of the direct bond
- The bonding conductor is permanently and directly connected to the electrical service grounding electrode system of the premises. This connection can be made at either:
 - Bonding buss
 - Grounding electrode conductor
 - Grounding electrode
- Any additional grounding electrodes used shall be bonded to the electrical service grounding electrode system
- Direct bonding to be performed by a person qualified to do so per local ordinances
- The bonding conductor shall be installed and protected in accordance with:
 - National Electrical Code, NFPA 70, (NEC)
 - Canadian Electrical Code, CSA-C22.1, (CEC)