



Manufacturer of Flexible Metal Hose and Gas Piping Products

Why National Consensus Standards Matter

The principal concern with HB222 revolves around the issue of whether it matters that all equipment and piping systems installed within Maryland homes be referenced to a national consensus standard (recognized by the State Fuel Gas Code) be allowed based only on what is called listing criteria, or, even more troubling, be listed to an arbitrary criteria with no referenced standard at all. The issue involves different types of corrugated stainless steel tubing (CSST) used to distribute natural gas and propane within residential and commercial buildings. At issue is the basis for what constitutes an approved product/material (in compliance with the state building and fire codes) that have been determined to be safe, reliable and in the best interest of the public welfare.

Precedence and conventional wisdom in the development and maintenance of both model and state level building codes is to rely exclusively on national consensus standards which are developed through a rigorous public review process. Every piping product and/or building material referenced in the State Fuel Gas Code has a national consensus standard with no exceptions. The one and only national consensus standard for CSST is the ANSI/CSA LC-1 Standard which has been in place since 1990.

National consensus standards are developed by organizations that are certified by the American National Standards Institute (ANSI) or other similar sanctioning organization. All fuel gas appliance standards used in North America have been developed by the Canadian Standards Association or CSA Group which is a recognized standards development organization (SDO). These standards have rigorous protocols for the development and maintenance of the standards that are enforced through audits from the ANSI. The technical committees (TC) charged with the development and maintenance of these standards must be balanced (in terms of the various organizations that have voting members on the technical committee so that no one group has a voting monopoly). Proposals for revisions can be submitted by anyone and all proposals must be deliberated by the TC. All proposed revisions must be sent out for public review, and all received comments must be fully resolved before the revisions can be reviewed for approval. Approval has its own process which involves independent US and Canadian over-sight bodies that separately sanction (or reject) the revisions under consideration. There is also an appeal process for parties that believe the process and/or the technical decisions were erroneous. This process is continuous and ongoing, based on the best available knowledge at the time, which is why consensus standards are often referred to as living documents.

The use of a listing criteria is intended for those emerging products that are not currently covered by a national consensus standard. The biggest difference between a consensus standard and the listing criteria is the development process. The listing criteria can be developed by an organization other than an SDO. ICC Evaluation Services is such a non-SDO. The LC-1027 is such a listing criteria that was developed at the behest of a single CSST manufacturer specifically for their special arc-resistant CSST design without any other considerations. Furthermore, the ICC development

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process is not a public consensus process such as the one used for ANSI sanctioned standards, and without a balanced TC and with limited or no public input.

The intention of the listing criteria is to allow the testing and evaluation of emerging products until such time that they can be covered by an existing national standard or a new one created. Listing criteria are not meant to be long-lived in lieu of such national standards. Such has been the case with LC-1027 which has essentially been obsoleted because of the inclusion of arc-resistance testing requirements within the national consensus standard LC-1. The standards community, through the LC-1 TC, reviewed all options and performance requirements for arc-resistance (including those contained within LC-1027) when the LC-1 Standard was updated in 2014 to include general requirements for arc resistance. All arc-resistant CSST are now tested and certified based on the LC-1 Standard, thus making the LC-1027 listing criteria superfluous. It should be noted that the LC-1027 listing criteria is NOT included in the ICC International Fuel Gas Code as an alternative to LC-1.

Adopting ICC-ES LC-1027 (or the provisions contained in the LC-1027) in lieu of ANSI/CSA LC-1 would create a number of unintended consequences for the State of Maryland:

- It would create a state sanctioned monopoly for one patented product and one manufacturer of CSST as LC-1027 was developed specifically for just that unique product design and not for the generic variety of CSST and only one manufacturer certifies their arc resistant product to the 36 coulomb requirement in the LC-1027.
- It would eliminate three of the four arc-resistant CSST products currently offered for sale in the State of Maryland.
- Creating such a legal barrier to commerce is tantamount to a restraint of trade.
- Protection against direct lightning strikes can only be met by the installation of a certified lightning protection system. To date, the State of Maryland has not deemed such protection a necessity for Maryland homeowners.
- Requiring the inclusion of LC-1027 (or the provisions therein) into the State Fuel Gas Code would conflict with the accepted standard of care of adopting only national consensus standards. Furthermore, LC-1027 is not a complete standard and does not stand alone as a replacement for CSA LC-1.

In summary, this issue has already been litigated with the signing of HB 1052 in 2022 establishing the requirement for arc-resistant CSST in accordance with its national consensus standard ANSI/CSA LC-1. Adoption of LC-1027 in lieu of LC-1 will create numerous potential conflicts as well as unwarranted interference by the State of Maryland into flow of commerce. Additionally, adopting the provisions of LC-1027 in lieu of the document itself has the same negative impacts as direct adoption of LC-1027 as it is the only document that contains testing criteria for testing to 36 coulombs.

Respectfully submitted,

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