



FREDERICK COUNTY GOVERNMENT
OFFICE OF THE COUNTY EXECUTIVE

Jessica Fitzwater
County Executive

HB 503 – Public Safety - Corrugated Stainless Steel Tubing for Fuel Gas Piping Systems - Requirements and Prohibitions

DATE: February 13, 2024
COMMITTEE: House Environment and Transportation Committee
POSITION: Favorable
FROM: The Office of Frederick County Executive Jessica Fitzwater

As the County Executive of Frederick County, I urge the committee to give HB 503 – Public Safety - Corrugated Stainless Steel Tubing for Fuel Gas Piping Systems - Requirements and Prohibitions a favorable report. This bill will improve building safety and protect Maryland residents and first responders by requiring that all Corrugated Stainless-Steel Tubing (CSST) meets the LC1 standard using the LC1027 testing criteria.

Since 2018, the state of Maryland has experienced three (two firefighters/one civilian) fatalities because of fires caused by lightning-induced failure of CSST. This issue became deeply personal to Frederick County when a CSST-related fire in 2021 resulted in the line of duty death of Frederick County Battalion Chief Josh Laird. While legislation was passed in 2022 to ban the use of first generation (i.e., non-arc resistant) CSST, further measures are needed to protect our firefighters, first responders, and residents.


Current law allows CSST to be used if it is arc-resistant. This could be using the LC1024 testing criteria with proper bonding or the LC1027 testing criteria. Unfortunately, CSST that only meets the LC1024 testing criteria is only sufficient for up to 4.5 Coulombs or 1000 amps even when properly bonded and grounded, while the average lightning strike in the US is approximately 24-28 Coulombs and can be much higher. This means that even arc-resistant and/or properly installed CSST is highly vulnerable to malfunction, and higher safety standards are needed.

The LC1027 testing criteria is tested at a charge of 36 coulombs and a peak current of 30,000 amp. Importantly, the lightning strike that hit the chimney of the house in the Ball Road Frederick County fire that resulted in the death of Battalion Chief Laird was estimated to be approximately 27,000 amp.

The science around CSST safety is clear and, as a result, the National Association of State Fire Marshal's (NASFM), along with the Fire Service Membership Council (FSMC) and the International Code Council (ICC), voted unanimously to recommend that LC1027 be adopted as the minimum testing requirement to improve the safety of CSST.

As local and state government, we have a responsibility to our constituents, including our first responders, to adopt laws, policies, and building codes that ensure the safety of our communities. Adopting stronger safety standards for the energy systems in our buildings is one simple way we can uphold that responsibility.

Thank you for your consideration of HB 503. I urge you to advance this bill with a favorable report.



Jessica Fitzwater, County Executive
Frederick County, MD