

# PROHIBITING UNSAFE

# CSST TUBING

SENATE BILL 586 / HOUSE BILL 503



## CSST DEFINITION

**Corrugated Stainless Steel Tubing (CSST)** is a flexible pipe used to provide natural gas and propane to many homes and businesses.



## DANGERS OF CSST

Certain kinds of CSST has been connected to several lethal fires. CSST is vulnerable to mechanical and electrical failure that can result in gas leaks or fire. This is especially an issue if lightning strikes a property with CSST that cannot withstand 20,000-28,000 Coulombs.

## WHAT SB 586/HB 503 DOES

This bill will ban the distribution of CSST that does not meet the ANSI LC1 Standard using LC 1027 testing criteria.



## THE FLYNN & LAIRD ACT (2022)

Passed House of Delegates (129-1)  
Passed Senate (47-0)

In Maryland, two firefighters, Frederick County Battalion Chief Josh Laird and Howard County Department of Fire and Rescue Services Lt. Nathan Flynn died in the line-of-duty responding to house fires caused by CSST malfunctions. In particular, these CSST malfunctions were caused by lightning strikes.

This bill prohibited the use of non-arc-resistant jacketed corrugated stainless steel tubing (CSST). This was to prevent tragedies, like with Flynn and Laird, from occurring again.

While passing this Act was a significant step forward, our latest bill will expand upon the Legislature's work and ensure that all CSST sold in Maryland can withstand lightning strikes.



## CAN CSST SURVIVE A LIGHTNING STRIKE?

**Average Coulombs of Lightning:**  
24-28 Coulombs

**Average Amps of Lightning:**  
20,000-28,000 amps

Many CSST that are available to buy in Maryland **cannot withstand a lightning strike.**



### Old Non-Arc Resistant CSST

**Can it handle a lightning strike?**  
No, this kind of CSST does not have an arc-resistant jacket so it is not able to withstand any lightning strike. It was banned in Maryland in 2022.



### ARC Resistant CSST (Meets the LC 1024 Testing Criteria)

**Can it handle a lightning strike?**  
No, while this CSST was designed to better withstand lightning strikes, its jacket has only been tested for 4.5 Coulombs. This kind of CSST is still legal to sell in Maryland.



### CSST (Meets the LC 1027 Testing Criteria)

**Can it handle a lightning strike?**  
Yes, this CSST has a jacket which can withstand 36 Coulombs. SB 586/HB 503 will make this type of CSST the only kind which can be sold in Maryland.

## NOTE ON TESTING STANDARD

The bill specifies that CSST which is "ANSI LC1 STANDARD USING THE LC 1027 TESTING CRITERIA" only can be sold or distributed. This is because ANSI LC1 is technically the standard for CSST in the International Fuel and Gas Code. LC 1027 or LC 1024 are testing criterias developed by the International Evaluation Service for ANSI LC1 Standard CSST, not a standard by itself.