

### STATE OF NEW HAMPSHIRE DEPARTMENT OF SAFETY

John J. Barthelmes, Commissioner

**Division of Fire Safety** OFFICE OF THE STATE FIRE MARSHAL J. William Degnan, State Fire Marshal



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# INFORMATIONAL BULLETIN ON CSST RESIDENTIAL SAFETY GUIDE FOR YELLOW COATED GAS TUBING (REVISED) JULY 22, 2012

The State Fire Marshal has developed this informational document to provide homeowners and other residents of New Hampshire with valuable information about propane and natural gas safety in your home. NH Senator Kelly Ayote in collaboration with the National Association of State Fire Marshals (NASFM) was the prime sponsor of a Senate Resolution to raise awareness of the safety concerns of this product. The CSST industry has assisted NASFM with this awareness campaign.

Accidental fires from direct and/or near lightning strikes can cause severe injuries or death to citizens. In addition, fuel gas systems that contain yellow coated corrugated stainless steel tubing systems may cause severe property damage if the gas system is not adequately protected or is not installed properly. For additional safety inspections and tips please contact your local fire department or this office at (603) 223-4289 or fmo@dos.nh.gov.

Homeowners and property owners who have yellow coated corrugated stainless steel tubing (CSST) in their homes are encouraged to determine if the system is properly bonded. Licensed New Hampshire fuel gas fitters who are certified in this product area should be contacted to make the correct determination on proper bonding protection of the natural gas or propane system. Consumers may visit <u>www.csstsafety.com</u> for additional information

### Yellow Coated Corrugated Stainless Steel Tubing (CSST)

The yellow coated corrugated Stainless Steel Tubing, or CSST, is a flexible gas piping system used for natural gas or propane fuel delivery system to appliances located inside buildings and homes. The product was developed in the 1980s and since 1990 the product has been installed in over 6,000,000 homes and businesses in America. Independent studies have revealed the fact that this tubing can fail when subjected to a spike in electrical energy generated either through a direct or indirect lightning strike to the building. The risk of fire resulting from a failure of this system can be reduced by means of equipotential bonding.

### How to Identify Yellow Coated CSST in Your Home

Yellow coated CSST may be located throughout your home as it is run much like the water pipes in a building. The tubing can range from one half inch in diameter to two inches in diameter in larger buildings. The piping is noticeable because the ridges in the tubing itself look like rings located just below the yellow coating material. While some systems run from your gas meter or propane regulator throughout your home; there are many installations where the yellow coated CSST may not be visible to the homeowner.

As the product is very flexible and easy to install, it may have been used in renovations, gas piping systems replacement or upgrade, and in new appliance installations. In these cases the yellow coated tubing may be located above a finished ceiling or behind a partition wall. Residents are encouraged to seek the advice of a New Hampshire licensed fuel gas fitter who has been specially trained to identify and correct any deficiencies in your current fuel gas piping system.



#### How to Protect Your Home

The CSST industry, in conjunction with the National Association of State Fire Marshal's (NASFM); support the bonding of CSST gas piping system to the electrical grounding system of your home. This bonding jumper or wire is connected to the CSST piping system at the entry point of the natural gas or propane piping, and runs as direct as possible to the electrical grounding system already present in your home. The National Fire Protection Association (NFPA) has required a #6 AWG bonding jumper for all CSST piping systems as part of its 2009 National Fuel Gas Code. This code has been adopted as part of the New Hampshire State Fire Safety Code.

Installing the #6 AWG bonding jumper for lightning protection is a task routinely performed by the trained, certified and licensed New Hampshire fuel gas fitter or a licensed electrician. A licensed fuel gas fitter who has been certified in the installation and service of CSSST has to the training and tools needed to protect your home. A licensed electrician has the protective equipment and training to attach the bonding jumper in your homes electrical panel. The process normally takes as little as twenty minutes to an hour and can be performed along with any yearly maintenance or service of your propane or natural gas appliances.





# Helpful Hints for Homeowners

- Examine your homes fuel gas system to identify if this product is present or;
- Consult with your fuel gas or propane supplier and have a licensed fuel gas fitter inspect your homes fuel gas system.
- If the yellow coated CSST product is present schedule an appointment to have the lightning protection bonding jumper installed.
- Consult with your local Fire Chief if you need additional information or assistance with the inspection or;
- Consult with your NH licensed electrician to have the bonding jumper installed and connected to your homes electrical grounding system
- Assure that the wire is routed as direct as possible and connected to the dwellings present electrical grounding system.
- Never use any wire smaller that a #6 AWG. In some cases a larger wire size may be required
- Never install an independent grounding rod for the CSST boding jumper.
- Never make any connections or install clamps to the ribbed portions of the CSST piping.
- Never attempt to enter an energized electrical panel box without the proper training and protective equipment; even to connect the jumper wire.
- Visit our web site at <u>www.nh.gov/safety/firesafety</u> for additional links or information regarding yellow coated CSST
- Call our office at 603-223-4289 or contact us at <u>fmo@dos.nh.gov</u> for additional assistance or clarification
- The National Association of State Fire Marshals (NASFM) recommends visiting the CSST web site at <u>www.csstsafety.com</u> for additional subject matter.
- Do not delay; check you home for safety today