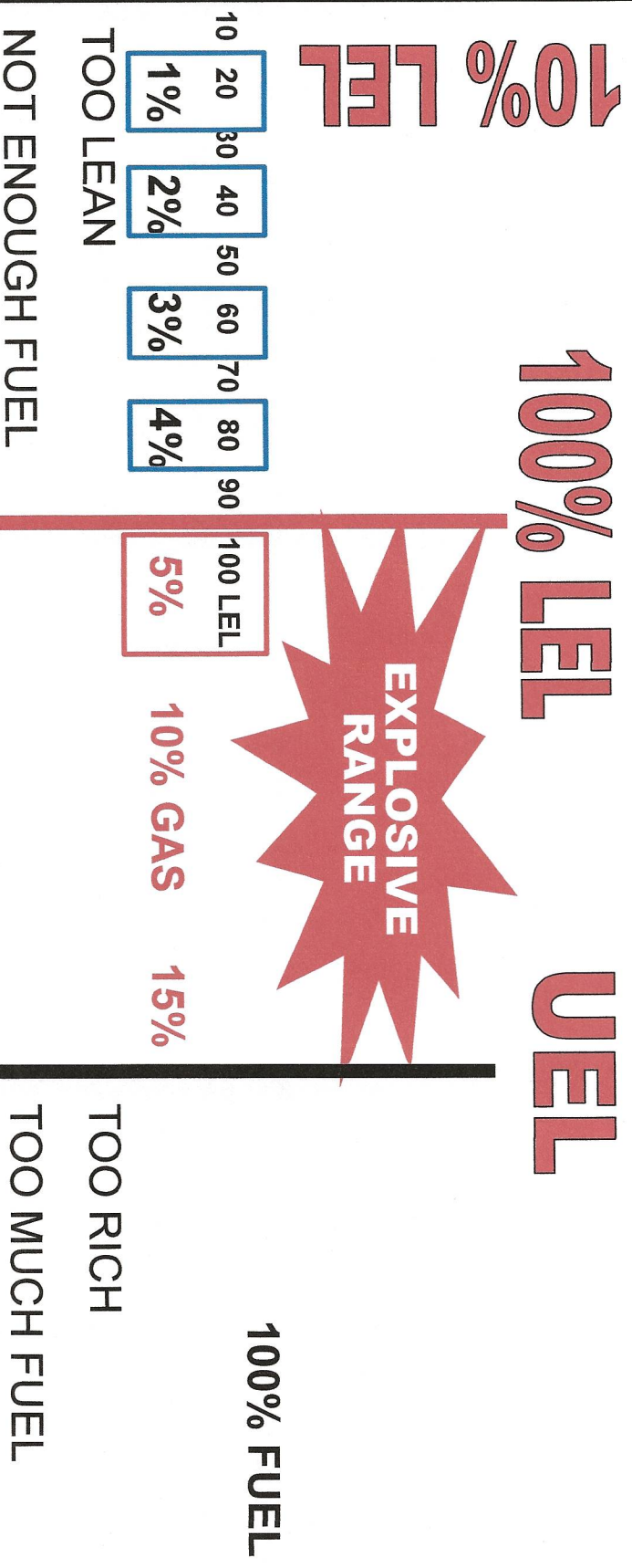


FLAMMABLE RANGE



METHANE GAS CONVERSION CHART

% GAS	% LEL	PPM	% GAS	% LEL	PPM
0.1	2.0	1,000	3.0	60.0	30,000
0.5	10.0	5,000	3.5	70.0	35,000
1.0	20.0	10,000	4.0	80.0	40,000
1.5	30.0	15,000	4.5	90.0	45,000
2.0	40.0	20,000	5.0	100.0	50,000
2.5	50.0	25,000			

Chart courtesy of SENSIT TECHNOLOGIES • Valparaiso, IN 46383
(219) 465-2700 • www.GasLeakSensors.com



SENSOR COMPARISON

CATALYTIC BEAD

- Lowest Sensing = 500 PPM
- Due to Field Conditions Like Air Movement, it may actually be 3000 PPM
- T90 Time maybe 30 Sec

METAL OXIDE

- *All Gas Utilities use These*
- *0-999 PPM*
- *Instant Alarm*
- *Can use as Leak Finder*
- *Long Life*
- *Minimal Calibration/Maintenance*
- *Detects Other Flammables*



IT

SENSIT TECHNOLOGIES | SENSOR CROSS SENSITIVITY CHART

SENSIT GOLD G2, GOLD, GOLD CGI, HXG-2D, HXG-3

NOTE: READINGS RELATIVE TO METHANE CALIBRATION. READINGS MAY VARY BASED ON SENSOR AGE AND CONDITION.

GAS OR VAPOR	FORMULA	SENSITIVITY (PPM)	100 LEL %	READING @ 10% LEL
Butane	$(CH_3)_3CH$	25	2	3%
Hydrogen	H_2	50	4	8%
MEK	$CH_3COCH_2CH_3$	100	1.8	0.6%
Methane	CH_4	10	5	10%
Methanol	CH_3OH	50	6	2.5%
N-Hexane	$CH_3(CH_2)_4CH_3$	400	1.2	0.2%
Pentane	C_5H_{12}	25	1.5	5%
Propane	C_3H_8	10	2.2	6%
R-22	$CHClF_2$	50	N/A	N/A
R-507	R125 + R143A	100	N/A	N/A
R-410A	R32 + R125	100	N/A	N/A



Important Information for Homeowners!

The Waukee Fire Department would like to provide important information to Waukee residents who have Corrugated Stainless Steel Tubing (CSST) gas pipe in their home.



What is CSST pipe?

CSST pipe is a flexible, metal gas piping system used in many homes constructed or remodeled since the early 1990s.

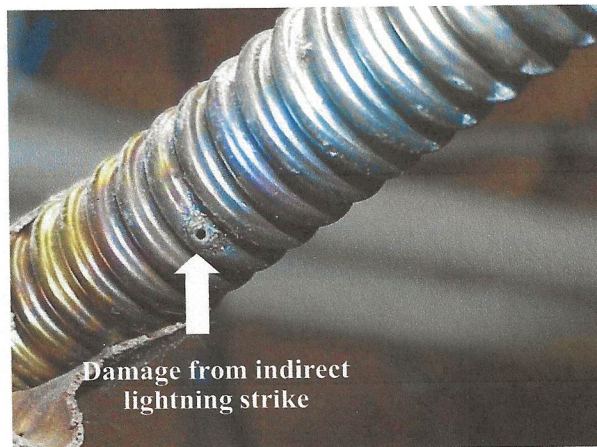
The corrugated tubing can be identified by a yellow plastic coating. The picture to the right shows what yellow CSST looks like. You commonly will see it where your water heater, furnace, or fireplace are located.



What's the Potential Issue?

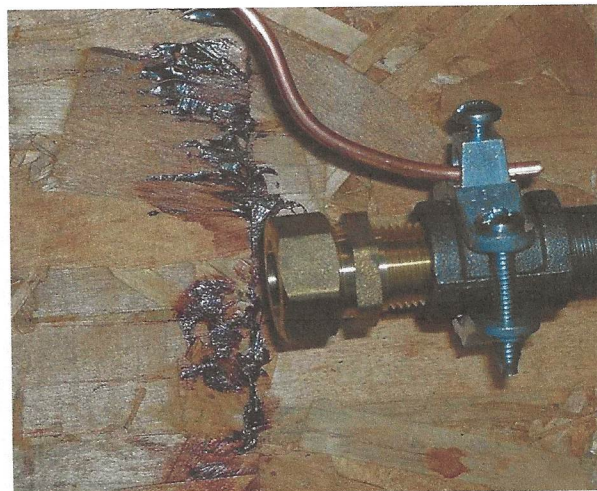
Many installations of CSST prior to 2010 do not have the appropriate bonding and grounding needed for the tubing.

Proper bonding and grounding may reduce the risk of damage or fire from a lightning strike. Even a nearby lightning strike that does not strike a structure directly can cause damage to CSST tubing that is not properly bonded and grounded.

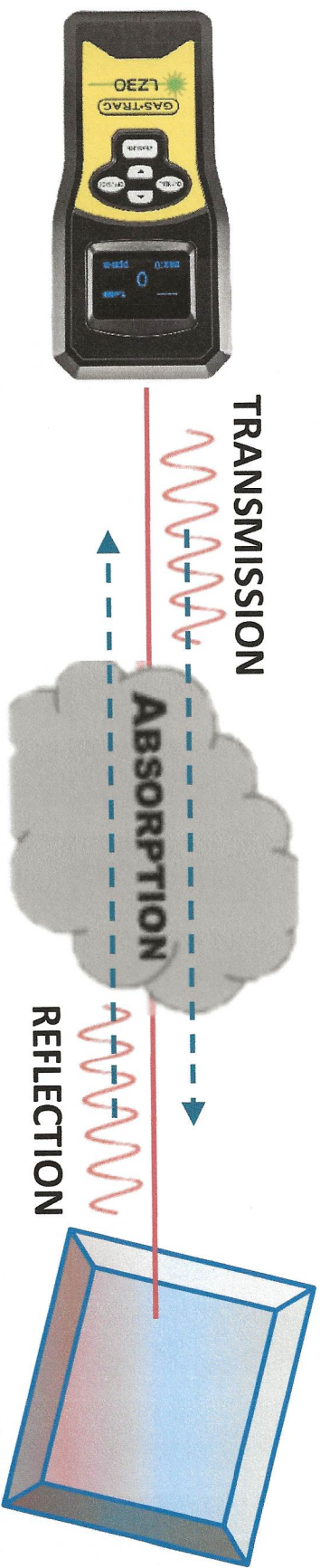


I can't tell if my CSST tubing is bonded or grounded. What should I do?

If you do not see any metal clamps or copper wire where your gas line enters your home from the outside or on any black iron pipe near CSST in your utility room, you are encouraged to contact an electrician or your home builder to assist you in determining the appropriate bonding and grounding that may be needed for the CSST in your home.



TDLAS – how it works



Methane (or any gas) absorbs a specific wavelength of light

The LZ30's laser emits the wavelength that is absorbed by methane

The amount of laser light absorbed is proportional to the amount of methane in the path of the beam

The gas concentration is expressed as PPM-M – parts per million meter
Concentration x plume width