

CASE STUDY

CounterStrike® in Home Fire Prevention

- Saves Money
- Saves Property
- Saves Lives

Product:
CounterStrike® CSST versus other gas pipe

Location:
Anywhere, USA



Historically, the fire death rate in the USA has been higher than most of the industrialized world.

While the United States has made significant progress in this regard it still has the 10th highest fire death rate in the industrialized world.

The National Fire Protection Association (NFPA) estimates that US fire departments responded to an average of 371,700 home structure fires per year during the 5 year period of 2006-2010.

These fires caused an estimated average of 2,590 civilian deaths, and 12,910 civilian injuries per year.

NOBODY HAS BEEN INJURED OR KILLED IN A HOUSE FIRE FROM THE INSTALLATION OF COUNTERSTRIKE!

The NFPA estimates that of the 371,700 home fires per year approximately 3700 (1%) of them occurred as a result of either natural gas or LP-gas being the first material ignited. These gas fires resulted in an annual average of 66 civilian deaths and 404 civilian injuries in 2000-2004.¹

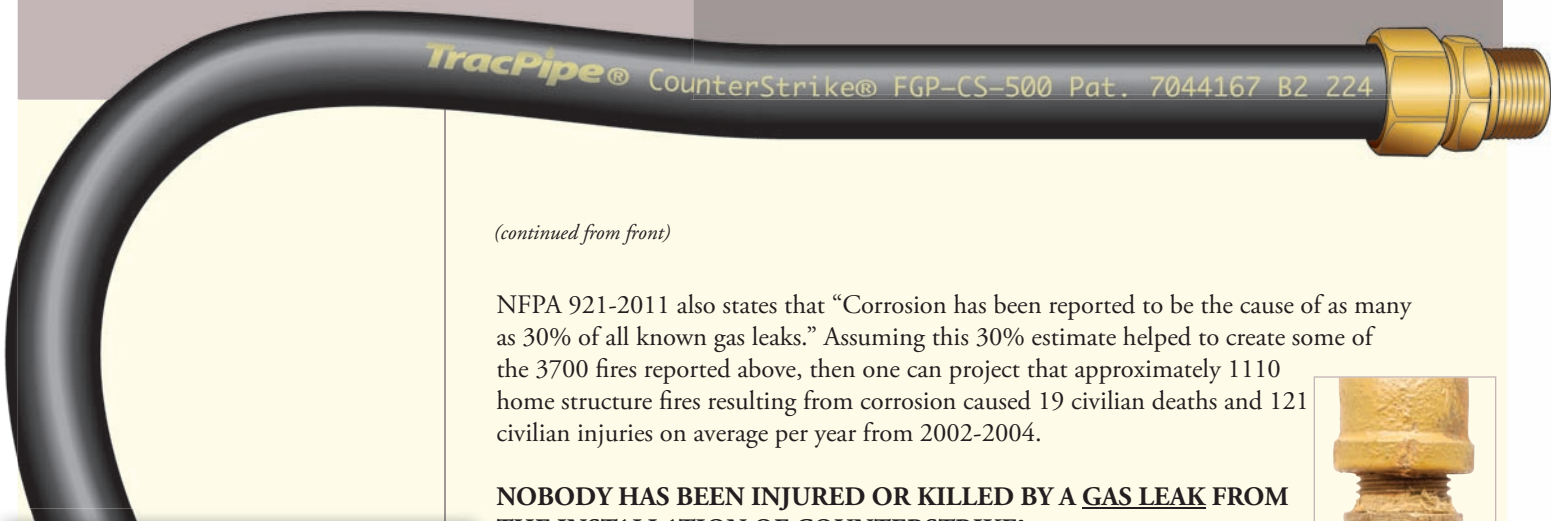
NOBODY HAS BEEN INJURED OR KILLED BY A GAS FIRE FROM THE INSTALLATION OF COUNTERSTRIKE!

According to the NFPA guide 921-2011 "Leakage from piping and equipment is the main cause of gas fueled fires and explosions. Commonly, *leaks occur at pipe junctions*, at unlit pilot lights or burners, at uncapped pipes and outlets, at areas of corrosion in pipes or from physical damage to the gas lines." *CounterStrike can be laid in one piece, eliminating the extra fittings required for black iron pipe!*



Recent UC San Diego earthquake testing proved that black iron pipe fractured and leaks while the CounterStrike CSST remained leak proof.

(continued on back)



(continued from front)

NFPA 921-2011 also states that “Corrosion has been reported to be the cause of as many as 30% of all known gas leaks.” Assuming this 30% estimate helped to create some of the 3700 fires reported above, then one can project that approximately 1110 home structure fires resulting from corrosion caused 19 civilian deaths and 121 civilian injuries on average per year from 2002-2004.

NOBODY HAS BEEN INJURED OR KILLED BY A GAS LEAK FROM THE INSTALLATION OF COUNTERSTRIKE!

The NFPA also reported that during 2004-2008 US fire departments responded to an estimated annual average of 4428 home structure fires started by lightning. These fires accounted for an annual average of approximately 10 civilian deaths and 36 civilian injuries during that same period.

NOBODY HAS BEEN INJURED OR KILLED BY A LIGHTNING FIRE FROM THE INSTALLATION OF COUNTERSTRIKE!

A 2011 study by PowerCet Corporation’s Chief Scientist Dr. Michael Stringfellow reported that there are up to 175 black iron pipe and 75 yellow CSST residential fuel gas lightning fires per year. CounterStrike is listed by the ICC and evaluated by IAPMO for lightning resistance.

THERE HAS BEEN NO LIGHTNING DAMAGE TO COUNTERSTRIKE!

CounterStrike is listed to Underwriter Laboratories (UL) for 1, 2, and 4 hour through penetration fire stops and meets ASTM E84 with respect to flame spread and smoke density. This permits installation in return air plenums.

SINCE ITS INTRODUCTION IN 2004 THERE HAVE BEEN NO INJURIES OR DEATHS CAUSED BY THE INSTALLATION OF THOUSANDS OF MILES OF COUNTERSTRIKE!

¹ Source: *Home Natural Gas and LP-Gas Structure Fires*, Jennifer D. Flynn, NFPA, Quincy, MA



CounterStrike is up to 400 times more lightning resistant than first generation yellow CSST.



Corroded iron pipe.



Above: Arcing damage inside black steel fitting melted steel visible upper right.

Pipe dope is used on BIP to make a pipe thread joint leak proof and pressure tight. In a fire or lightning strike the pipe dope may become compromised and allow the pipe to leak.



Wardflex 2 (pictured above) does not meet ASTM E84 with respect to flame spread and smoke density.

(Wardflex is a registered trademark of Ward Manufacturing LLC)