

# **TracPipe® CounterStrike®**

*Flexible Gas Piping by OmegaFlex®*



**All of the safety, ease and performance you've come to expect from OmegaFlex's flexible gas piping – only better.**

## Proven Performance

**TracPipe® Counterstrike® has millions of feet, and tens of thousands of installations, in the United States without a single documented instance of lightning damage to the product.**

So protect yourself and your customer and specify the safest CSST product in the world!

- TracPipe® Counterstrike® has been shown to be up to 400 times more resistant to the damaging effects of electrical energy than yellow CSST.
- Uses the same AutoFlare® fittings as our traditional line of CSST.
- The most complete range of CSST sizes (3/8" - 2") available.
- There are no additional bonding requirements for TracPipe® Counterstrike® imposed by the manufacture's installation instructions.
- Lays straighter and pulls easier, dramatically decreasing installation times (and saving you time and money in the process).
- Unlike competitive brands, TracPipe® Counterstrike® is non-annealed making it more crush resistant, safer to install and easier to cut.



- TracPipe® Counterstrike® has larger pipe diameters compared to competitive brands, so save money by using a smaller size Counterstrike! (ie 3/8" Counterstrike versus 1/2" other brand).
- Highest overall EHD Flow Capacity Rating.

**Improve your Profit Margins by taking advantage of TracPipe® Counterstrike® highest end flow capacity**



2 psi System Single Family Large	Load Mbtu	Length of Tubing	OUR Tube Size	THEIR Tube Size
Trunk Line	250	80	1/2"	3/4"
Water Heater	60	25	3/8"	1/2"
Furnace	100	50	1/2"	1/2"
Dryer	35	60	3/8"	1/2"
Range	55	40	3/8"	1/2"
<b>TOTAL</b>	<b>250</b>			

### Rich Stothers

Service Manager & Partner, *South Florida Gas*

Last year, the company started using CounterStrike exclusively. "The main reason we exclusively use CounterStrike is that Florida is the lightning capital of the world. CounterStrike eliminated all my concerns about lightning. I feel it is the best material in the market."

"At first, we thought that CounterStrike seemed more rigid than yellow pipe, but we actually found that the smooth coating jacket aided us in the installation process, allowing it to flow easier when installing the product."

## Black of the Past

For decades, schedule 40 black iron pipe was the default choice for gas piping. But in the United States, there are about 65 people killed every year in gas explosions. That is why an alternative to black iron pipe was developed—corrugated stainless steel tubing (CSST). First developed in Japan to solve the dangers of broken rigid gas piping in an earthquake, and then brought to the United States by the American Gas Association (AGA) and the Gas Research Institute (GRI) as an alternative gas piping solution, CSST was developed to eliminate the difficulties and dangers of rigid gas piping. **Unlike black iron pipe, not one person has been injured or killed due to defects in CSST in the United States. In fact, of the approximately 380,000<sup>1</sup> fires in US home structures every year, only 19<sup>2</sup> of these were attributed to CSST and lightning, while over 1000<sup>3</sup> were caused by leaking or broken rigid gas pipes!**



*Rigid pipe presents a variety of **problems**:*

- Rigid pipe breaks in earthquakes, tornados and other natural disasters.
- Multiple joints frequently leak.
- Pipe dope deteriorates over time and leaks when exposed to lightning strikes.
- Black iron pipe is not listed to any national standards for gas piping. **TracPipe® Counterstrike® piping can withstand the same forces of nature—earthquakes, lightning, tornados—that make black iron pipe crack.**
- Most rigid steel pipe is made overseas—with little or no quality control.

**THE NEW 2012 ICC CODES NOW REQUIRE 3RD PARTY CERTIFICATION AND MANUFACTURERS IDENTIFICATION ON ALL BLACK IRON PIPE USED FOR GAS PIPING APPLICATIONS!**

## Black to the Future



*Flexible TracPipe® Counterstrike® presents a variety of **solutions**:*

- Bends and conforms by hand.
- Pull gas pipe like electrical wire.
- Saves typically 75% of installation time or more.
- Cuts with a standard tube cutter.
- No threading or welding hassles.
- Unique, patented Autoflare® fittings require no special tools to seal the first time, every time.
- TracPipe® Counterstrike® weighs a fraction of black iron pipe, for potential workers' compensation savings.
- Combined with 5 PSI. elevated pressure, 2-inch TracPipe® Counterstrike® replaces 5-6 inch black pipe at 14" W.C.
- TracPipe® Counterstrike® is rated for indoor and outdoor use.
- Up to 75% fewer joints than black iron pipe per installation.

<sup>1</sup> U.S. Home Structure Fires, Marty Ahrens, NFPA Fire Analysis and Research Division, Quincy, MA, March 2010.

<sup>2</sup> Validation of Installation Methods for CSST Gas Piping to Mitigate Lightning Related Damage, Fire Protection Research Foundation, Quincy, MA, April 2011.

<sup>3</sup> Natural Gas and LP Gas House Structures Fires, Jennifer Flynn, NFPA Fire Analysis Division, Quincy, MA, January 2010.

## TracPipe® Counterstrike® vs. other Traditional CSST Piping

- Heavy one piece abrasion and lightning resistant jacket, pulls easier and lays straighter decreasing install time.
- Highest Pressure Ratings. Tested by IAS (AGA Labs) for ratings up to 125 PSI working pressure.
- Highest Capacity Ratings (EHD). Higher flow rates can reduce pipe size and save money.
- Uses the same Tracpipe Auto Flare® Fitting (patented). Unsurpassed reliability, the only fitting that is both self-flaring and self-piloting to pipe's inner diameter.
- TracPipe® Counterstrike® offers the largest selection of tee fittings, terminations and metal wall boxes.
- No additional manufacturers bonding required.
- Meets ASTM E84 with respect to flame spread and smoke density. This permits installation in return air plenums.



Lightning can be very unpredictable and strike almost anywhere at any time of day or night! Every year the US is hit by millions of lightning strikes and while only 18% of lightning fires occur in homes, they account for 88% of associated civilian deaths, 77% of associated injuries and 70% of direct property damages!<sup>1</sup>

### Not one person has been injured or killed due to defects in CSST in the U.S.A.

In 2003 Omega Flex® began testing its traditional CSST product, to determine the mechanisms by which the CSST could be damaged by electrical arcing.

The company worked with Lightning Technologies Inc., which operates one of the world's most complete, accredited, simulated-lightning test laboratories. LTI works to eliminate lightning hazards in products in various industries, including aerospace, commercial airlines, ground support systems and electrical distribution.

Based on this research, Omega Flex then began to develop a conductive CSST jacket that would dissipate the energy from a nearby lightning strike, instead of acting as an insulator.



Simulated lightning test with no product failure

The current version of TracPipe® Counterstrike® has been tested by LTI and was shown to be up to 400 times more resistant to the damaging effects of electrical energy than competitive CSST piping.

No product, including TracPipe® Counterstrike® is immune to damage caused by a direct lightning strike. Refer to NFPA 780 for lightning protection systems for buildings and building systems.

#### Joe Hayes

Vice President, Plumbing Services Division  
Coolray and Mr. Plumber

Coolray and Mr. Plumber has been using CounterStrike from OmegaFlex exclusively for two years because of the extra protection it provides—without the need for additional bonding—while still allowing for significantly reduced installation time. "Any time we're able to reduce labor costs, it's a win-win for the customer and the company," said Hayes.

<sup>1</sup> NFPA Fire Analysis and Research, Quincy, MA-Lightning Fires, December 2010.

# All of the safety, ease and performance you've come to expect from OmegaFlex's flexible gas piping – only better.

## HISTORY OF INNOVATION

Since 1975, OmegaFlex has led the piping industry with its high-quality construction and commitment to exceed the industry's product and safety standards.

- With over 90 patents and counting, the Company's philosophy is not to wait for mandates, but to lead the industry by introducing the best products.
- In 1997, the Company introduced TracPipe®, the finest CSST system on the market that when properly installed makes likelihood of damage to the system from natural occurrences very small.
- In 2004, the Company developed CounterStrike®, which contains all of the innovative features of TracPipe® plus a built-in solution to lightning damage that eliminates the need for additional bonding.

Now in keeping with our continued commitment to innovation and putting the best product on the market, we proudly are transitioning our traditional CSST products exclusively to TracPipe® CounterStrike®.



**Kevin Hoben**  
CEO, Omega Flex Inc.

"OmegaFlex has been at the forefront of working with the national building code organizations to adopt uniform regulations to protect homes and other structures from lightning damage," noted Mr. Hoben. "We believe that starts with a requirement that all metallic systems in the home be bonded together, which includes all gas piping systems. Until the day that equipotential bonding becomes the national standard, our TracPipe CounterStrike product eliminates the need for additional bonding of CSST systems, making homes safer and a professional installer's job much easier. Through TracPipe CounterStrike, we have developed a comprehensive solution to the several challenges in product design and code compliance."

## WORKING TOWARDS A NEW STANDARD IN CSST

TracPipe® CounterStrike® exceeds all industry product and safety requirements – it is simply the best product on the market. Inconsistencies in the model building codes regarding bonding and grounding led us to create a product that eliminates the need for additional bonding – providing the preeminent product on the market.

- TracPipe® CounterStrike® is up to 400 times more resistant to damage from electrical arcing than traditional CSST products.

TracPipe® CounterStrike® is also:

- The only CSST listed by ICC Evaluation-Services-PMG 1058 and evaluated by the International Association of Plumbing and Mechanical Officials (IAPMO) ER 0227 for lightning resistance without additional bonding (unless required by local codes).
- Compliant with codes in all 50 states, with 8 years of proven field success it is the best gas piping product on the market today.
- Compliant with model codes, including the National Fuel Gas Code (NFPA 54), International Fuel Gas Code (IFGC) and the Uniform Plumbing Code (UPC).
- Listed to ANSI LC 1-2005, as well as Factory Mutual (FM) for seismic resistance and Underwriters Laboratories (UL) listed for 1, 2 and 4 hour through penetration fire stop systems without removal of the conductive jacket.



**TracPipe® Counterstrike® Piping**

Part Number	Size	Reel Length	Lb/Reel
FGP-CS-375-250	3/8"	250	37
FGP-CS-375-100	3/8"	100	17
FGP-CS-500-500	1/2"	500	98
FGP-CS-500-250	1/2"	250	52
FGP-CS-500-100	1/2"	100	24
FGP-CS-500-50	1/2"	50	14
FGP-CS-750-250	3/4"	250	70
FGP-CS-750-100	3/4"	100	31
FGP-CS-750-50	3/4"	50	18
FGP-CS-100-180	1"	180	70
FGP-CS-100-100	1"	100	40
FGP-CS-100-50	1"	50	22
FGP-CS-125-250	1 1/4"	250	129
FGP-CS-125-150	1 1/4"	150	78
FGP-CS-150-250	1 1/2"	250	182
FGP-CS-150-150	1 1/2"	150	103
FGP-CS-200-150	2"	150	137



TracPipe® Counterstrike® CSST is sized exactly the same as conventional yellow TracPipe CSST and uses the same patented AutoFlare fitting.

**David Jeffers**  
Plumbing Service Manager, Lee Company

"Even though we've used CSST for years without any problem, we switched to CounterStrike about three years ago and now use it nearly every single day, in 1,500 to 1,800 homes each year," he said. "We haven't had a single problem with it."

According to Jeffers, the company has used CSST for many years for customers who switch from electrical to gas appliances. "Using CSST reduces our labor costs by nearly 40 percent. It's a good product that's not very labor intensive," he said. "Even though the material is slightly more expensive than black-iron pipe, there's a much better return on labor when we use CounterStrike."

**AutoFlare® Straight Fittings**

Description	Part Number	Size	Pkg Qty	Weight/Lbs
AutoFlare Straight 3/8"	FGP-FST-375N	3/8" x 3/8" NPT	24/box	.3
AutoFlare Straight 3/8"	FGP-FST-375	3/8" x 1/2" NPT	24/box	.4
AutoFlare Straight 1/2"	FGP-FST-500	1/2"	24/box	.4
AutoFlare Straight 3/4"	FGP-FST-750	3/4"	16/box	.5
AutoFlare Straight 1"	FGP-FST-1000	1"	16/box	.7
AutoFlare Straight 1 1/4"	FGP-FST-1250	1 1/4"	6/box	1.5
AutoFlare Straight 1 1/2"	FGP-FST-1500	1 1/2"	4/box	2.1
AutoFlare Straight 2"	FGP-FST-2000	2"	4/box	3.5
Spare Split Ring	FGP-RING-SIZE	3/8" - 2"	pack	



Find out more today on TracPipe® CounterStrike® at [www.tracpipe.com](http://www.tracpipe.com)

For more information on CSST Safety visit [www.csstfacts.org](http://www.csstfacts.org)



TracPipe®CounterStrike® gas piping complies with model codes including the National Fuel Gas Code (NFPA-54), International Fuel Gas Code (IFGC), and Uniform Plumbing Code (UPC). It is Factory Mutual (FM) listed for seismic resistance; UL listed for through-penetration firestop systems. TracPipe®CounterStrike® is also listed to ANSI LC 1-2005.



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