

## TracPipe® CounterStrike® Flexible Gas Piping Specification Sheet

<b>SPECIFICATION DATE:</b>
<b>PROJECT NAME:</b>
<b>MODEL NUMBERS:</b> FGP-CS-375 - FGP-CS-500 - FGP-CS-750 - FGP-CS-1000 - FGP-CS-1250 - FGP-CS-1500 - FGP-CS-2000
<b>A. Standards &amp; Certifications:</b> All flexible gas piping system components must be:
<p><b>A.1</b> CSA International Certified Corrugated Stainless Steel Tubing (CSST) Flexible Gas Piping with Mechanical Attachment AutoFlare® Fittings that conform to the latest ANSI standards for safe performance ANSI LC-1 /CSA 6.26.</p> <p><b>A.2</b> Underwriters Laboratories Classification Listed for Thru Penetration Fire Stop Requirements Ratings to include one, two, three and four hour tests.</p> <p><b>A.3</b> Listed with FM (Factory Mutual) requirements for Flammable Gas Piping Systems. For seismic resistance.</p> <p><b>A.4</b> Tubing shall be tested and listed in accordance with ICC LC-1024. For resistance to arcing from transient energy.</p>
<b>B. Stainless Steel Tubing:</b>
<p><b>B.1</b> Tubing shall be made from 300 series Stainless Steel Strip conforming to ASTM A240.</p> <p><b>B.2</b> Tubing shall not be subjected to heat treating or annealing after the corrugation forming operation.</p> <p><b>B.3</b> Tubing shall be suitable for operation with fuel gases.</p> <p><b>B.4</b> Tubing is rated for 25-PSI.</p> <p><b>B.5</b> Tubing must have elevated pressure ratings of 125G for sizes up to 1-1/4 inches for high-pressure applications permitted by the Local Distribution Utility. These elevated pressure ratings shall be demonstrated by test reports from the certification agency.</p>
<b>C. Plastic Jacket:</b>
<p><b>C.1</b> The jacket shall be extruded from fire-retarded Polyethylene.</p> <p><b>C.2</b> Chlorinated plastics such as PVC are not permitted.</p> <p><b>C.3</b> ASTM E-84 flame spread rating shall not exceed 25.</p> <p><b>C.4</b> ASTM E-84 smoke density rating shall not exceed 50.</p> <p><b>C.5</b> Polyethylene is to be resistant to UV.</p> <p><b>C.6</b> Jacket shall be a single layer black and electrically conductive.</p>
<b>D. AutoFlare® Mechanical Attachment Fittings:</b>
<p><b>D.1</b> Fittings shall be made from yellow brass.</p> <p><b>D.2</b> Fittings shall be equipped with a stainless steel insert to pilot on the tubing ID and provide a reliable flaring operation.</p> <p><b>D.3</b> Fittings are tested and listed by CSA International for concealed use where required.</p> <p><b>D.4</b> Fittings are available in straight, straight reducer, tee, reducer tee and coupling configurations.</p> <p><b>D.5</b> Fittings shall provide a metal-to-metal seal (no gaskets).</p>
<b>E. Protective Devices:</b>
<p><b>E.1 Striker Plates:</b></p> <p><b>E.1 A</b> Striker plates shall be listed as part of the <b>OMEGAFLEX, INC. TracPipe®</b> system and shall be marked with the symbol of the Manufacturer (<b>OMEGAFLEX, INC.</b>) and the listing Agency (CSA International).</p> <p><b>E. 1 B</b> Striker plates shall be made from carbon steel, heat-treated to RB75.</p> <p><b>E. 1 C</b> Striker Plates are available in Quarter, Half, Three Quarter, Full and 6 X 17 Configurations.</p> <p><b>E.2 Floppy Conduit:</b></p> <p><b>E.2 A</b> Floppy conduit used for additional protection with striker plates (type RW electrical conduit) is to be made from galvanized steel.</p>
<b>F. Accessories:</b>
<p><b>F.1 Termination Mount Fittings</b> are to be used to provide a secure termination for the tubing at moveable appliance locations and other "stub-out" points depending on building construction. Termination mount accessories consist of a plated carbon steel plate or brass mounting flange and an <b>AutoFlare®</b> fitting. Fittings at termination mounts must be accessible and provide a fitting joint exterior to the building floor or wall.</p>

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Continued

## F. Accessories: Continued

**F.2 Meter Termination Fittings** may be used for exterior wall penetrations at meter locations and other penetrations such as roof top units. Meter terminations consist of a plated carbon steel mounting plate and sleeve and an **AutoFlare** fitting. Fittings at meter termination outlets must be accessible and provide a fitting joint exterior to the building.

**F.3 Manifolds** are made from malleable iron either poly coated or uncoated. Manifolds may be mounted using available manifold brackets or Gas Load Centers; they may alternatively be mounted using conventional pipe mounting methods.

**F.4 Pounds-to-inches line pressure** regulators shall be listed per ANSI Z21.80 or a recognized national standard for pressure regulators. Regulators must be mounted in an accessible location.

**F.4.1** Regulators with included approved vent-limiting device do not require venting to outdoors provided they are mounted in a ventilated location (e.g. near a gas appliance which also requires placement in a ventilated area). Ventilated locations include (but are not limited to) mechanical rooms, attics, garages, and basements.

**F.4.2** Approved vent limiters limit the fuel gas leakage to 2.5 cfh in the event of a diaphragm failure.

**F.5 Shut-off valves** must be approved for fuel gas service and must be rated for the pressure of the gas piping system installed. For elevated pressure sections an approved valve must be located upstream from the pounds-to-inches regulator.

**F.6 Overpressure protection devices** must be installed for elevated systems higher than 2-PSI to prevent downstream pressure from exceeding 2-PSI in the event of regulator failure.

## G. Bonding:

**G.1** Primary protection from nearby lightning strikes for all metallic systems within a building is recommended to be provided by proper grounding of the electrical system and equipotential bonding of all metallic systems including the gas piping system. Grounding and bonding shall be in accordance with the National Electrical Code NFPA 70.

**G.2** The installation of a lightning protection system per NFPA 780 is recommended in areas prone to a high level of lightning strikes to protect the building in the event of a direct strike.

**G.3.** There are no additional bonding requirements for **CounterStrike**® imposed by the manufacturer's installation instructions. The piping system is to be bonded in accordance with the National Electrical Code NFPA 70 Article 250.104, and any local requirements which may be in excess of the manufacturers requirements.

**G.4.** Wherever possible, tubing runs should be installed with a bend radius of 8 inches or more.

**G.5** Where required by the AHD the bonding clamp must be attached to the brass **AutoFlare**® fitting adapter (adjacent to the pipe thread area –see illustration below) or to a black pipe component (pipe or fitting) located in the same electrically continuous gas piping system. The corrugated stainless steel portion of the gas piping system **SHALL NOT** be used as the bonding attachment point under any circumstances.

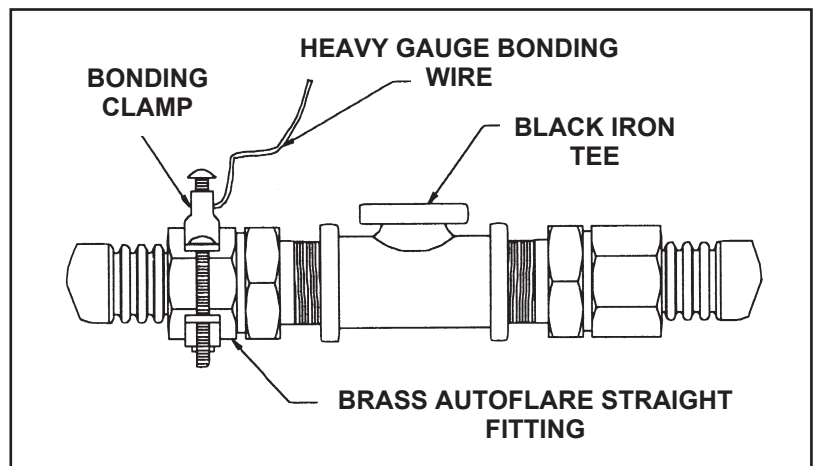


Diagram is for illustration purposes only.  
Bonding wire attachment when required by local code.