

CASE STUDY

CounterStrike® CSST and TracPipe® PSII in Commercial Structures

- Save Time
- Save Money
- Increase Installation Options

TracPipe® CounterStrike® FGP-CS-500 Pat. 7044167 B2 Z24

TracPipe® FGP-UGP-500 0425 110 FEET

Product: CSST Flexible Gas Piping in Underground and Aboveground Applications

Location: Laurel, MD

The Vine is a 283-unit luxury apartment project community to be built in Howard County, MD. The 4-story 536,742 SF residential building will be finished with top of the line amenities, materials, finishes and equipment. The residential complex will be a mix of one, two, and three bedroom apartment units ranging from 732 – 1662 SF all with direct access to a 5-level/504 stall precast concrete parking garage. By incorporating a 5-level parking structure into the building design all 504 resident parking spaces can be accommodated in a structure that consumes 80% less impervious land area which offers a huge benefit environmentally to the project and overall community. The complex will house a 10,000 SF amenity package including state of the art fitness center, pub, lounge, business center, leasing offices and more. Exterior amenities are centered around a resort style swimming pool, outdoor 4 seasons space with fireplace, grill stations and an extensive landscape pathway system connecting each outdoor courtyard space to each other and to the Maple Lawn Community adjacent to the site.

The Vine was installed by Charles A. Klein and Sons. Don Fink is the general contractor, and uses CSST on every project he can. This project consists of (3) four story buildings with a five story parking garage and built in two phases. OmegaFlex Applications Engineering Dept. produced complete piping drawings and sizing details for this project in a few short weeks.

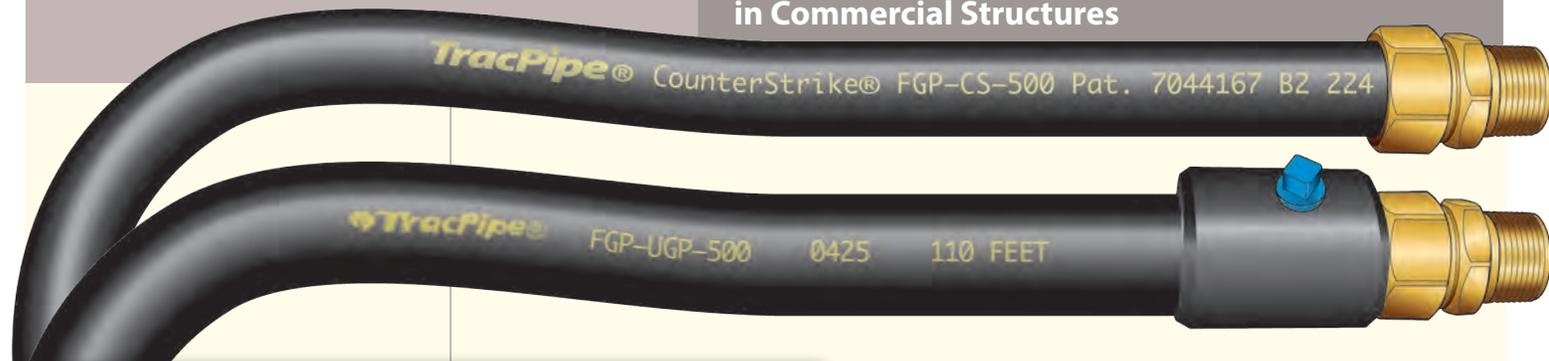
(continued on back)



6" PVC sleeves with 10 lines of PSII each.

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(continued from front)

PSII

The first phase of this project involved the use of over 78,000 feet of PSII product. The majority of the project was $\frac{3}{4}$ " with a small portion of $1\frac{1}{2}$ " for common areas. The location of the meter room made it necessary to run under the slab of the parking garage. Don Fink was aware of our PSII product, and it was a perfect fit for what he needed on this job. Needing to cut the corner, Klein used 6" PVC sleeves and ran ten $\frac{3}{4}$ " lines through each. These runs varied in length, but for study purposes, there were 77 lines that stretched 196 feet, 106 lines of 254 ft, and 106 lines at 342 feet. Klein was thrilled we were able to offer 1200 foot reels, eliminating waste and the need for couplings. Klein ordered sixty five 1200 foot reels,

weighing 525 pounds each. They manufactured two spool holders, and were able to do seventy two of the long runs in only four days. Don Fink was extremely happy with the results because of the ease of installation and labor savings for this portion of the job and would use us again "in a heartbeat" for any future underground needs. He is using a combination fitting to transition to CounterStrike for his above ground process.

CounterStrike®

The aboveground portion of the Vine job entailed over 90,000 feet of CounterStrike using $\frac{3}{4}$ " and $\frac{1}{2}$ " pipe. There are 283 apartments each requiring runs to a furnace and a range. 2 PSI was supplied which allowed for downsizing to $\frac{1}{2}$ " in many cases. The sizing was originally done at $\frac{3}{4}$ " throughout the job, but our engineering department was able to downsize over 45,000 feet from $\frac{3}{4}$ " to $\frac{1}{2}$ " for substantial savings. Our ability to deliver 3500 foot $\frac{1}{2}$ " reels as well as 2000 foot $\frac{3}{4}$ " reels once again prevented huge amounts of waste as well as the need for couplings. The use of AutoSnap® fittings further deepened the savings by saving 3-5 minutes per fitting multiplied by nearly 600 fittings, or 30-60 man hours. Again, Don Fink estimated one week to tie all of the meters in to our pipe vs. 3-4 weeks if he used black iron pipe and is extremely pleased with the ease and speed of CSST vs. black iron pipe.

Charles A. Klein & Sons, Inc. is a Plumbing, Heating, and Air Conditioning Contractor servicing Maryland, Delaware, Pennsylvania, Virginia, West Virginia, New Jersey, and Washington D.C..

They have been a quality Plumbing, Heating and Air Conditioning contractor for 35 years and have served thousands of households and businesses!



PSII coming up to connect with CounterStrike.



CounterStrike install to appliance.