

CASE STUDY

CALIFORNIA PLUMBING CONTRACTOR SPEAKS OUT ABOUT METAL SYSTEM BREAKDOWNS; INSTALLS CPVC SYSTEMS

Kennco Plumbing, Inc.

Santa Clarita, CA

Established: 1988

Californians have long been considered progressive thinkers who are willing to try new things and take action when injustice occurs. In Southern California, where harsh soil and water conditions have been plaguing homeowners for years, causing metal plumbing systems to fail, class action lawsuits are being brought up against builders who have continued to install galvanized steel plumbing systems in aggressive water and soil areas.

Since 1988, Kennco Plumbing has been installing plumbing systems in residential, commercial and warehouse facilities. With 45 plumbers and support staff, Kennco has more than 20 crews in the field. Kennco has developed relationships with Daviddon Homes, Pardee Homes, and Cornerstone Properties for residential construction ranging from 1,700 to 3,600 square feet and from \$200,000 to \$600,000.



Kennedy realized early on that galvanized steel plumbing systems were failing at an astounding rate. He switched to using only copper plumbing materials, which he discovered had some instances of failure when used under the slab. "I saw a hole develop in a fitting of a copper plumbing system in just 21 months," said Kennedy. "Other times, copper piping has corroded in just a couple of years. I've seen examples of corrosion in hard drawn water where homeowners had to replace their system in less than eight years."

Contractor Searches for Alternative to Metal Systems

Kennedy decided to review alternatives to metal plumbing systems to see if there was a better way to save homeowners from the cost and frustration of retrofitting their plumbing system. "It is not right to put customers through the worry of re-piping their homes every 10 years," said Kennedy. "I have one crew that is dedicated to just re-piping metal systems in aggressive water areas," said Kennedy.

Kennedy began using PEX (cross-linked polyethylene) systems as an alternative to metal systems. While PEX plumbing systems do not have the corrosion problems associated with metal systems, the tools required for installation are very expensive and require additional training to use. PEX is also harder to install in smaller spaces.

In 1996, the FlowGuard Gold® piping systems consultant from Lubrizol introduced Kennedy to FlowGuard Gold® CPVC plumbing systems. Initially, Kennedy was skeptical about the product. Then, Kennedy attended FlowGuard Gold® CPVC University, a training program sponsored by Lubrizol. The two-day seminar is a highly interactive course taught by Joe Hartman, a licensed master plumber with more than 40 years of plumbing experience. Participants experience hands-on training through the classroom, the lab and at a simulated home construction site.

"I was concerned about the durability of using a CPVC system," said Kennedy. "But when I saw the rigorous testing performed on FlowGuard Gold® CPVC and its lasting performance in residential and commercial applications, I decided to try the product."

CPVC plumbing systems will not rust, corrode, pit or scale under any water conditions including the most aggressive well water and city water with high levels of chlorine. According to ANSI/NSF Standard 61, in environments with aggressive water, where pH levels are less than 6.5, copper plumbing will not meet the water quality standard. Plus, copper piping cannot resist certain soil chemistries or compositions and will begin to degrade in underslab applications. In these severe conditions, copper pipes can develop pinholes and leaks, resulting in considerable maintenance costs as well as leaching of copper into the water, causing it to not meet applicable potable water quality standard.

FlowGuard Gold® CPVC plumbing systems exceed ANSI/NSF Standard 61 for water quality with no pH level restrictions. Unlike copper tubing, CPVC systems maintain their properties in high acidic levels. In fact, CPVC is the only plumbing system that does not contain any metal in the entire system. With homeowners demanding reliable and safe plumbing systems, CPVC pipes maintain the pristine level of water quality coming into the home.

CPVC plumbing systems also meet all model code approvals, including the International Plumbing Code, International Residential Code, BOCA National Plumbing Code, Standard Plumbing Code, Uniform Plumbing Code, CABO 1- and 2- Family Dwelling Code and Canadian Plumbing Code. PEX is not approved by the Uniform Plumbing Code.



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Type of Construction:
Residential –
Single Family

Installation Type:
New

FLOWGUARD GOLD®
PIPE & FITTINGS
NOT A DROP OF DOUBT.

FLOWGUARD GOLD®

"I'm confident that FlowGuard Gold® CPVC plumbing systems will last in the homes we install it in," said Kennedy. "And, it is reassuring to know that Lubrizol stands behind its products."

Easier, Straightforward Installations

"The product offers many benefits in addition to corrosion resistance that rival copper plumbing systems, including an easier and more straightforward installation process," said Kennedy.



FlowGuard Gold® CPVC plumbing systems are faster and easier to install for the professional plumber, reducing overall labor costs. CPVC plumbing systems require simple hand tools for installation, and no torches or crimping tools are needed. A one-step joining system can be pressure tested in as little as 10 minutes after assembly.

Given the ease of installation and the ability to make job changes on site, CPVC plumbing system installations are more predictable. Kennedy found that his plumbers could meet deadlines faster than ever before. And, unlike other plastic systems, CPVC is readily available in sizes up to 2" in diameter.

"We believe that in the future, we will be piping more and more homes with FlowGuard Gold® CPVC," said Kennedy.

Educating the Homeowner

By educating consumers about the benefits of FlowGuard Gold® CPVC plumbing systems, Kennedy has been able to reach builders who are resistant to switching from metal plumbing systems. "We want homeowners to be satisfied for years to come, and we can demonstrate to builders that FlowGuard Gold® CPVC will assure them of lasting performance."

CPVC plumbing systems offer better insulation and energy savings than metal plumbing systems. Homeowners have found the thermoplastic properties of CPVC plumbing systems provide insulation to reduce condensation and keep hot water hotter and cold water colder than copper, resulting in less energy loss through the wall of the pipe. This can save homeowners money on heating and cooling bills and virtually eliminate "sweaty pipes." The thermoplastic properties of CPVC systems also provide a system that is four times quieter than copper, reducing the potential of the pounding noise of water hammer.

"I'm so convinced in the product, that when I re-piped my own home, I used only FlowGuard Gold® CPVC pipe and fittings," said Kennedy.

Since Lubrizol's development of CPVC plumbing systems over 45 years ago, more than three (3) billion feet of CPVC pipe has been installed in homes, condominiums, buildings, apartments and hotels, including twelve (12) million homes. For more information on the FlowGuard Gold® plumbing system, including pipes, valves, joining cement, caulks, sealants and tools, call 1-888-234-2436, X7393, or visit www.flowguardgold.com.

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