THE GUIDE TO DEBUNKING CPVC MYTHS

DEBUNKING THE MYTHS SURROUNDING **FLOWGREEN CPVC PIPE AND FITTINGS**

FLOWGREEN
PLUMBING SYSTEMS
PIPE & FITTINGS

THE GUIDE TO **DEBUNKING CPVC MYTHS**

INTRODUCTION

FlowGreen Pipe and Fittings are made out of CPVC, or chlorinated polyvinyl chloride. This durable thermoplastic material is trusted by homeowners and professionals around the world, and has been successfully used in residential plumbing systems for more than 55 years.

Working closely with homeowners, plumbers and traders through the years, we've encountered a few misconceptions about CPVC and FlowGreen piping.

In this guide, we debunk these myths and explain why more and more households are relying on CPVC for hot and cold water plumbing systems.

FLOWGREEN
PLUMBING SYSTEMS
PIPE & FITTINGS

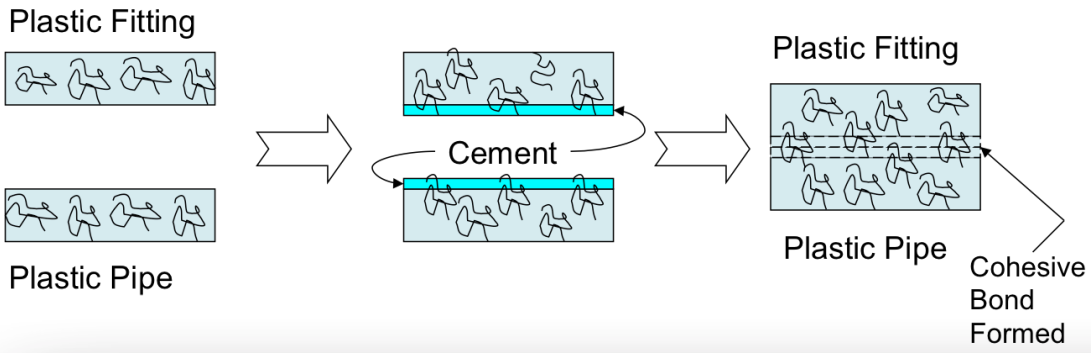
MYTH:
CPVC JOINTS ARE LIKELY TO FAIL.

FACT:

CPVC pipe and fitting joints are the strongest part of the system.

FlowGreen CPVC pipes are joined using a **simple solvent cement process. Solvent cement is not a glue.** Instead, it chemically fuses the material at the molecular level, creating long-lasting seams.

CPVC Solvent Cement Mechanism



When solvent cement is applied to CPVC, the solvent softens the outer layer of material, which enables it to fuse itself with an adjoining piece at the molecular level.

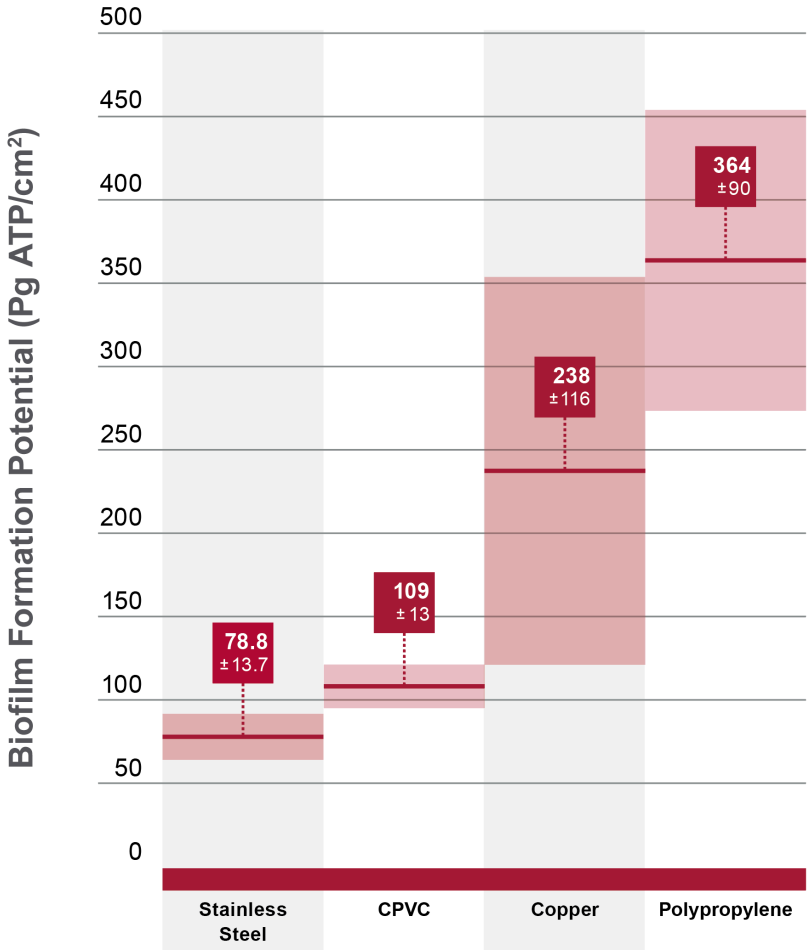
If a CPVC joint fails, it is almost always a result of an improper connection, or cheap, poor quality material. FlowGreen CPVC, is subjected to stringent quality control measures throughout the manufacturing process, ensuring reliable piping material.

MYTH:
CPVC IS UNSAFE FOR DRINKING WATER.

FACT:

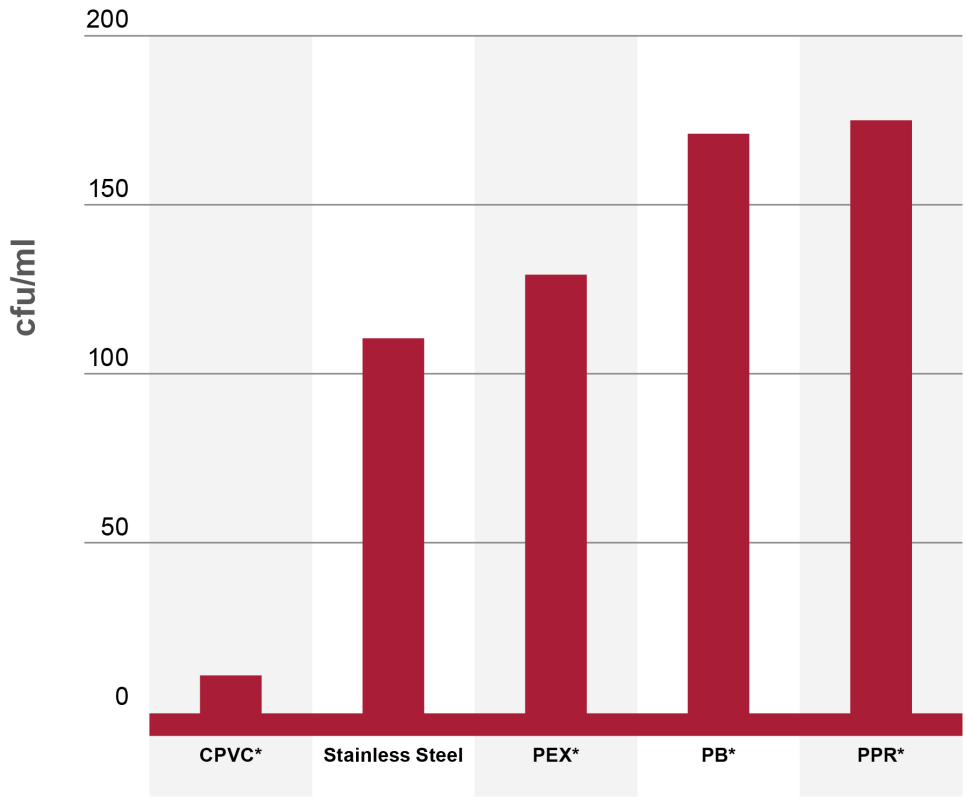
CPVC delivers safe and clean water. Major international public health agencies, including ASTM International, have approved FlowGreen CPVC for safe use in potable water systems.

- Unlike green pipe (PPR), FlowGreen CPVC has been verifying that an extremely low lead content is leached into the supply.
- FlowGreen CPVC does not contain any plasticizers, flame retardants, bio-stabilizers and anti-static agents.
- Research from Virginia Tech shows that CPVC materials do not affect drinking water taste or odor.
- FlowGreen CPVC systems keep water clean and help prevent bacterial growth caused by biofilm formation.



Number of Legionella Bacteria in Test Water

(average after 8, 12 and 16 weeks - static test, no flow)



*Average of 2 Samples

Myth: CPVC Is Unsafe for Drinking Water

Multiple studies,have confirmed FlowGreen CPVC will not contribute harmful contaminants to drinking water.

"CPVC consistently outperforms most other non-metallic piping materials with regard to its ability to resist the formation of biofilms."

- Dr. Paul Sturman, Research Professor and Industrial Coordinator for The Center for Biofilm Engineering at Montana State University

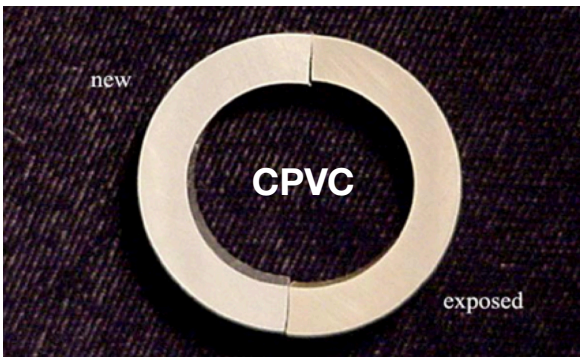
MYTH:
CPVC HAS A SHORT SERVICE LIFE.

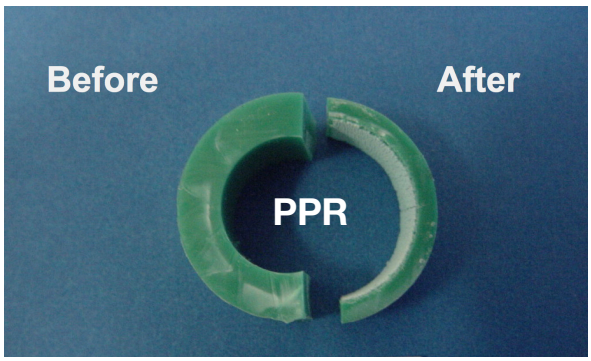
FACT:

CPVC piping systems installed more than 55 years ago are still performing around the world.

- **FlowGreen CPVC is resistant to chlorine-based disinfectants.** Unlike green pipe (PPR), FlowGreen CPVC is resistant to the additives used to keep your drinking water safe, including chlorine and chlorine dioxide. These common household cleaners can be used safely with FlowGreen CPVC —chlorine dioxide causes pipe failure in PPR systems.

Chlorine Resistance Testing: CPVC vs. PPR





The CPVC pipe on the left was installed in the 1960's. After 23 years of installation FlowGreen CPVC did not show any signs of damage to the material or reduction of the internal diameter. The green (PPR) pipe on the right was tested in accordance with NSF P-171 (Protocol for Chlorine Resistance of Plastic Piping Materials) and showed significant signs of pipe wall erosion after only 9 and a half months.

MYTH:
GREEN PIPE (PPR) IS BETTER THAN CPVC BECAUSE IT'S NEWER.

FACT:

CPVC is the dominant piping material throughout Saudi Arabia, and FlowGreen CPVC is the most commonly used brand. Homeowners and plumbers prefer FlowGreen CPVC over PPR because of its:

- **Fire resistance:** FlowGreen CPVC is self extinguishing and will not support combustion—meaning it won't spread a fire like other plastics that continue to burn after exposed to a flame. Flowgreen CPVC earned the best fire resistant rating for a non-metal material.
- **UV resistance:** Ultraviolet rays breakdown green pipe overtime, whereas FlowGreen CPVC can stand up to prolonged UV exposure.

Natural Weather Effects on Properties of CPVC Material

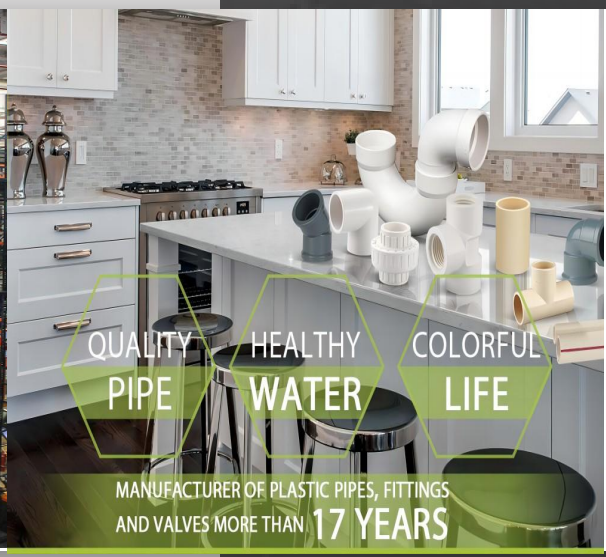
Samples from locally manufactured CPVC commercial pipes have been naturally weathered for different periods in harsh Saudi weather conditions. Standard tensile and SEN fracture toughness tests were performed after natural exposure up to nine months. The test results showed that exposure had limited effects on the material. The damage due to weathering is mainly a surface phenomenon.

- **Easy, cost-effective and safe installation:** Solvent welding allows for fast and easy assembly using solvent cement. Solvent cement does not require heat or expensive, specialized tools, whereas PPR does. By eliminating heat, the threat of a fire hazard is neutralized.

FLOWGREEN CPVC: RESIDENTIAL PIPING SYSTEMS YOU CAN TRUST

FlowGreen CPVC continues to set the industry standard for residential piping systems. As the leader and pioneer in CPVC technology, FlowGreen Pipe and Fittings are the best performing polymer piping products in the market.

For questions about using FlowGreen CPVC pipe in residential plumbing systems, contact us by phone or email Now!



RELIABILITY
TESTED FOR LIFE

FLOWGREEN
PLUMBING SYSTEMS
PIPE & FITTINGS

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