

What else makes PVC & CPVC smart choices?

- ✓ Vinyl is more than 50-percent derived from salt, one of the most plentiful resources on earth.
- ✓ Advances in vinyl formulations have made today's vinyl products – including PVC and CPVC – especially durable, saving on replacement materials and requiring less maintenance over their useful lives.
- ✓ Principia Partners found a 79-percent recycling rate for post-industrial rigid vinyl and a 71-percent rate for post-industrial flexible vinyl.
- ✓ PVC pipe with recycled content is available from several manufacturers offering multi-layer pipes with a recycled-content inner core. PVC pipes can also be recycled in either post-consumer or post-industrial forms to make second-generation vinyl products.
- ✓ A 1995 study by the American Society of Mechanical Engineers (ASME) analyzing emissions for nearly 170 different combustion facilities found no statistical relationship between the amount of chlorine (vinyl) in the waste stream and the amount of dioxin emitted from an incinerator. The study did find that the incinerator design and operating conditions – primarily temperature – were keys to controlling dioxin. EPA regulations are forcing reductions in dioxin emissions by addressing operator controls.

PVC basics:

PVC pipe is manufactured by extrusion in a variety of sizes and dimensions and generally sold in 10' and 20' lengths. PVC pipe is available in both solid wall or cellular core construction.

Where can you use PVC piping?

PVC can be used under ground or above ground in buildings. It can also be used outdoors if the pipe contains stabilizers and UV inhibitors to shield against ultraviolet radiation and it is painted with a water-based latex paint.

PVC materials are resistant to many ordinary chemicals such as acids, bases, salts and oxidants.

CPVC basics:

Chlorinated Poly (Vinyl Chloride) (CPVC) is used for potable water distribution, corrosive fluid handling in industry and fire suppression systems.

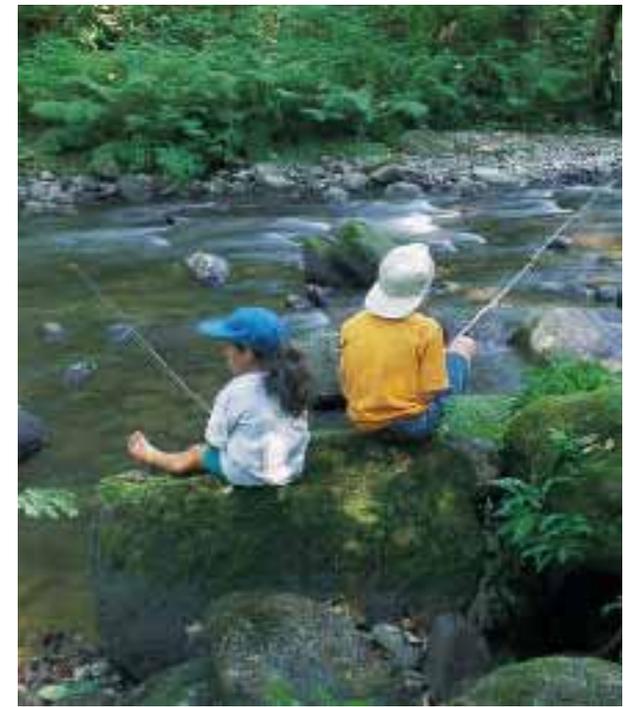
Industrial CPVC pipe is manufactured by extrusion in sizes from ¼" to 12" diameter to Sch 40, Sch 80, and SDR (Standard Dimension Ratio) dimensions.

CPVC pipe for plumbing distribution systems is manufactured by extrusion in sizes ¼" through 2" copper tube size (CTS) dimensions.

Where can you use CPVC pipe?

CPVC piping which is suitable for hot and cold water distribution has a 400-psi pressure rating at room temperature, and a 100-psi pressure rating at 180° F.

CPVC materials are resistant to many everyday household chemicals.



PVC & CPVC: *delivering clean water for a healthy planet*

Polyvinyl Chloride (PVC) and Chlorinated Poly (Vinyl Chloride) (CPVC) together are the most widely used plastic piping materials. Because they provide dependable, maintenance-free piping service without contaminating exterior materials or interior fluids, they are the products of choice for applications that include water delivery; drain, waste, and vent (DWV); and sewage disposal.

PVC and CPVC have been an integral part of the construction landscape for 40 years. These systems are corrosion resistant, easy to install and handle, cost effective, widely accepted by codes, and provide a long service life.



Plastic Pipe and Fittings Association

800 Roosevelt Road, Bldg. C, Ste. 20, Glen Ellyn, IL 60137
Phone: 630/858-6540; Fax 630/790-3095; www.ppfahome.org

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PVC & CPVC are corrosion resistant

Under normal soil and water conditions, PVC and CPVC remain inert and will not react with acids, fungi or bacteria in surrounding soil or in liquids passing through them. However, these same contaminants can cause a corrosive reaction in metal pipe leading to leaks and larger breaks. Even a pinhole leak in metal pipe can unknowingly allow bacteria, fungi or acids to contaminate drinking water on the way to a household tap. In sewage disposal systems, the same corrosion allows unwanted bacteria and viruses to escape into the environment.

CPVC and PVC piping materials protect drinking water and the environment from these invaders. Like the plastic gloves, tubing and disposal materials used to protect healthcare workers and patients from disease, plastic piping protects drinking water in its delivery from the treatment plant to your tap and protects the environment from waste materials traveling from the drain to disposal.

Corrosion resistance means long, maintenance-free service life. The leaks and breaks caused by corrosion in metal piping are not a significant factor in PVC or CPVC.

In fact, there is very little change in installed plastic piping systems after dozens of years. This means uninterrupted service, free of contamination or clean up as a result of leaks or breakage.



Photo courtesy of Environmental Dynamics, Inc.



Third party certification

In addition to being manufactured according to the strict standards of the American Society for Testing & Materials (ASTM) and the Canadian Standards Association (CSA), CPVC and PVC are tested by nationally certified agencies such as NSF International and Underwriters Laboratories (UL) for performance and health effects.

This testing to nationally recognized, consensus standards assures safety of these products for use in drinking water systems.

Widely accepted by codes

All model plumbing codes have accepted CPVC piping for potable hot and cold water distribution and PVC piping for DWV, sewers, and potable water services.

Clean manufacturing

PVC and CPVC manufacturing are clean, energy efficient processes that consume far fewer BTUs than the manufacturing of comparable metal pipes. Because they weigh far less than metal pipes, CPVC and PVC also save significant energy in transportation.

Easy installation

Installing PVC and CPVC saves energy over metal competitors. Their lighter weights make them easier to manage on the jobsite. The traditional lead pot and torch are not required for installation, saving time and money and reducing workplace hazards.

