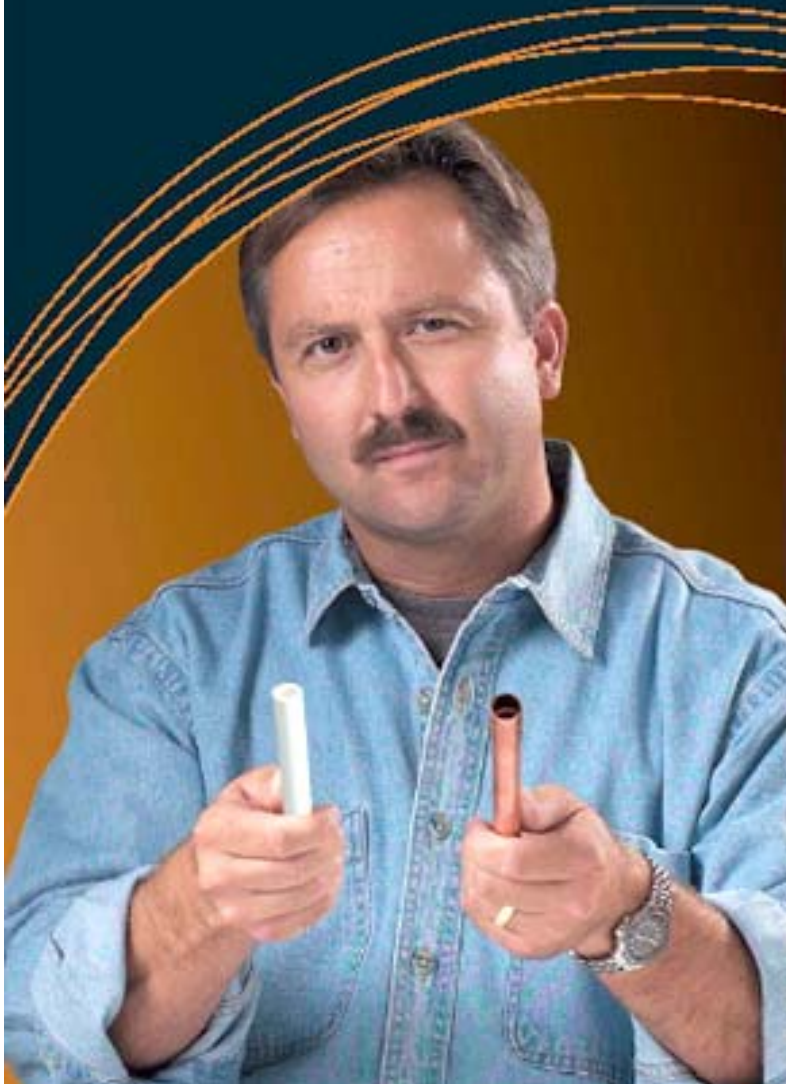


Who Says Plastic Pipe is as Good as Copper?



Copper Tradition

Seven Decades of Success and Counting

Copper tube and fittings have provided dependable service for more than 70 years. It's estimated that over 30 billion feet have been installed in plumbing systems in North America.

Today, contractors, consulting engineers, builders and homeowners have a choice when it comes to plumbing tube and fittings. They can choose copper or plastic. Many claims are being made that plastic products are as good as copper. But in reality, nothing comes close to copper's quality and reliability.



Copper Plumbing Tube 100%



PEX Brand A 64%



PEX Brand B 68%

Copper Quality

50 Year Warranty and More

Copper tube and fittings are backed by a transferable 50-year Manufacturer's Limited Warranty for residential plumbing systems.



Total interchangeability is another plus for copper. Solder fittings and tube produced by all copper manufacturers are completely compatible. No special system requirements peculiar to any one manufacturer are involved.

With plastic products, contractors are warned not to mix pipe and fittings from different manufacturers. If you mix materials from different PEX manufacturers' systems, it may void the warranty as well.

One plastic pipe manufacturer even requires installers to complete a special training course on its products, or its normal warranty does not apply.

Copper & Weather

Sunlight Can Degrade Plastics

There have been cases of ultraviolet rays from the sun degrading PEX pipe in as little as a few weeks. As a result, improper storage of PEX pipe can result in rapid failure.

Copper systems are not affected by ultraviolet rays.

Copper Performance

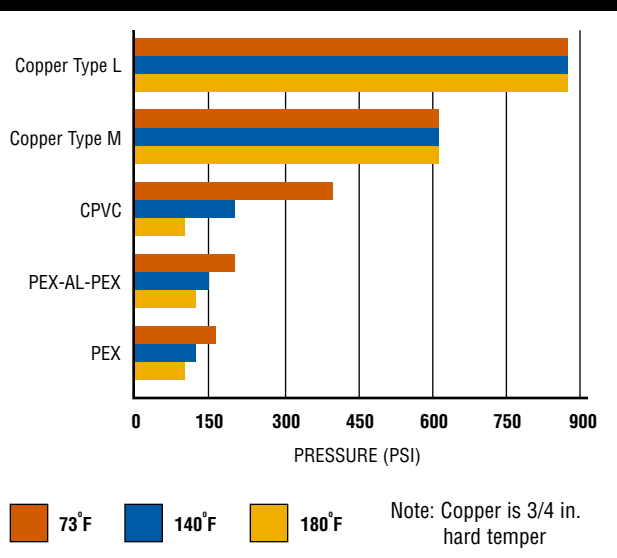
Flow, Pressure, and Reliability

Copper tube can handle pressures and temperatures several times greater than plastic plumbing materials. Just compare the data extracted from Canadian codes, product specifications and installation handbooks.

There are times when you'll need copper's higher pressure capabilities. When you do, it's good to know that copper can meet the challenge.

Check out the unrestricted flow characteristics of copper tube and fittings. Copper fittings are on the outside of the tube. Most PEX fittings are inserted into the pipe. This means that the inside diameter of a PEX Brand A coupling is just 64% the size of copper, and PEX Brand B is just 68% the size of copper.

Comparison of Pressure Ratings



Copper & Safety

Fire and Permeability

Copper water tube will not burn or give off toxic fumes in a fire. As well, copper tube is non-porous and non-permeable, meaning that contaminants like gasoline can not pass through the wall of an underground service tube into the drinking water supply.

Plastic plumbing materials, on the other hand, are generally classified as combustible piping by building codes. Also, some are permeable. Certain plastic pipe materials should not even come in contact with products as common as cooking oil, certain insecticides, and a number of pipe thread compounds and lubricants.

Copper & Cost

Check the Real Bottom Line

Material costs, installation costs, service costs, long-term performance, recyclability and scrap value need to be evaluated when selecting a material for any size of plumbing system. Copper is the clear choice when all factors are considered.

Remember that the copper you use now will perform an important function throughout its service life before being recycled into new products.

Copper & Environment

Recyclability vs. the Land Fill

Copper has economic value. Think of all the cut ends and short pieces which are collected on job sites and turned in to dealers for cash. There's no comparable demand for bits and pieces of PEX or CPVC.

Recyclability goes hand-in-hand with value. Copper retains up to 90% of its value when it is recycled. Only about 12% of the estimated 5.8 trillion pounds of known copper ore has been mined since copper's value was first recognized more than 10,000 years ago. Why? Because copper is so reusable and recyclable. Today, most new copper plumbing products are made up of over 80% of pure, recycled copper. On the other hand, plastic pipe is made from petroleum products – a nonrenewable resource.

The Tradition Continues

2003 marks the celebration of the 75th anniversary of the introduction of copper plumbing tube in North America. In Canada, the first standard for copper water tube was developed by the Canadian Standards Association in the mid-1930's. Today ASTM Specification B88 is used throughout North America. Plus, in Canada copper plumbing tube is third-party certified by an independent testing organization.

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