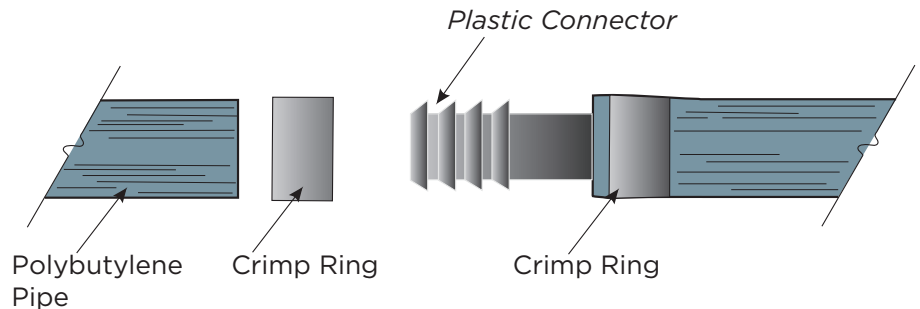


Polybutylene Pipe

Polybutylene pipe (often called poly-b or PB) is a flexible gray plastic pipe used for interior water supply systems. PB was introduced in the late 1970s and has been used in approximately six million homes, apartments and mobile homes. PB piping is very common in mobile homes; perhaps up to 50% of mobile homes contain PB. The product has been sold under the trade names Quest, Thermoguard and Flex-Temp.



Polybutylene piping is inexpensive and can be installed very quickly. There are fewer connections because PB piping comes in long rolls that can be cut exactly to length. Connections are made with a plastic (acetal) insert and aluminum crimp rings. A special crimp tool is used to squeeze the aluminum crimp ring to hold the PB tightly to the plastic insert.

Leaking Joints

In the late 80s, many PB piping installations started to fail. The fittings and connections started to leak. The main culprits were the plastic inserts used at connections and the aluminum crimp rings. In about 1986, in an attempt to deal with the failures, new copper inserts and crimp rings were developed. The plastic fittings and aluminum crimp rings were not completely off the market until about 1993. The metal fittings were more reliable but many claim that they also suffer from poor reliability.

There are class action lawsuits involving PB piping. The lawsuits involve hundreds of millions of dollars. Some have already wrapped up while others are ongoing. Search the class action web sites for more information if you believe this affects you.

Factors Contributing to PB Piping System Failures -

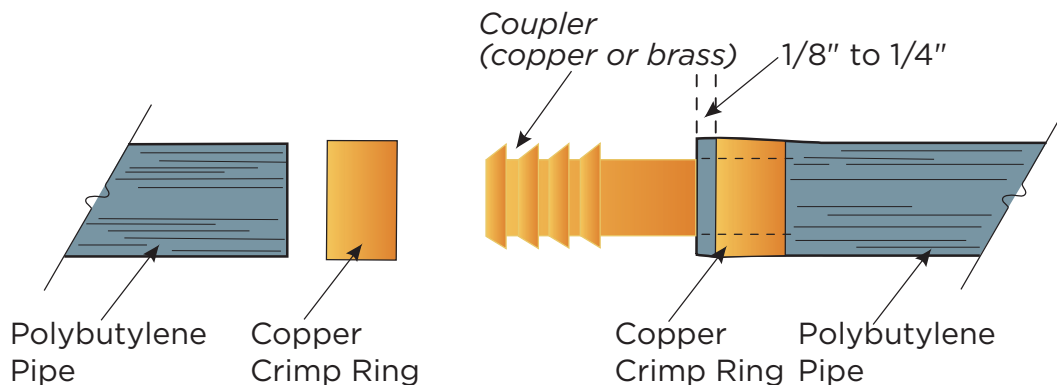
- Plastic inserts cracking and leaking
- Over crimping of aluminum crimp rings leading to failure
- Poor installation
- Exposure to high temperatures such as direct connect to hot water tank (not allowed)
- Local water chemistry was also thought to be a contributing factor

Not All Plastic is PB

There are many plastic piping systems that are not polybutylene. The following are not polybutylene:

- Any rigid (non-bendable) plastic is not PB. These pipes are likely PVC or CPVC. The joints are glued not crimped
- Cross-linked Polyethelene, also called PEX is not the same as PB. This is a high quality flexible plastic piping system. PEX has been used for decades in Europe for hot water radiant heating systems. PEX has demonstrated good performance over many years. Like PB, some PEX systems use crimp connectors. It is easy to mistake PEX for PB. PEX is usually red or blue although its natural color is a creamy white. If in doubt, a plumber can identify the piping material for you.

If you believe your supply piping system is made of polybutylene, you should hire a plumber to inspect the system.



Poly-B Crimp Connection