Everything You Need to Know About Poly B™ Piping

and How to Hire a Qualified Contractor

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PLUMBING AND GAS

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BBB ACCREDITED BUSINESS

Dear Homeowners,

We understand the frustrations that come with receiving the news that your home contains Poly B™ piping can come as quite a shock. You may be currently dealing with steady leaks in your home, and you're concerned about further damages. Or, perhaps you haven't experienced a leak in your home, but are aware a home contains Poly B™ piping and are trying to determine if a replacement is necessary.

If any of these sound familiar, you are in the right place and this document will be essential in helping you through this process.

We can tell you from more than 15 years experience dealing with Poly B piping. We have seen every possible outcome and scenario. We have seen homes completely flooded due to pipe bursts, and homeowners spending thousands of dollars on fixing leaking pipes only to have another leak happen in a matter of weeks. These are all genuine scenarios when dealing with Poly B.

The situation is unfortunate, frustrating, and costly, and we completely understand that. However, a 100% remediation of active Poly B piping from a property is the only solution to ensure complete peace of mind and prevent any Poly B nightmare from happening in the future.

Who is Tyee Mechanical?

Tyee Mechanical is a leader in Poly B Replacement in the Comox Valley. We service central Vancouver Island and the Northern Gulf Islands. Our Polybutylene pipe replacement service offers a complete re-piping service for any commercial or residential building. All Poly B replacement work is done in-house by Tyee Mechanical, and we do not hire any outside contractors.

We are licensed, bonded, and insured plumbers with decades of experience. We have successfully completed several Poly B remediations in the Comox Valley. Our business has received a number of 5-star reviews online for our plumbing, heating and gas service.

What is Poly B™ piping?

Poly B™ piping, known as polybutylene, is a type of grey plastic plumbing pipe most commonly used for residential plumbing works between 1985 and 1997. Poly B™ was common in North America, almost all new builds and renovations that took place during these years used this type of pipe. Poly B™ has been banned due to extensive water and property damage caused by it's high failure rates.

What does Poly B™ Piping look like?

If your home was built or renovated between 1985 and 1997, it is crucial to have your home inspected for possible Poly B pipes. The first way to identify Poly B piping is by its colours. Polybutylene piping is made in blue, silvery gray, and black colours. Blue pipes wer used mainly for cold weather, while black and silvery gray were used interchangeably for indoor and outdoor purposes.

Why does Poly B™ Piping fail?

When it was first introduced to the plumbing industry, Poly B was widely accepted due to its affordability and flexibility. However, it was not long when its molecular flaws came to light and the pipe started to rupture and fail woefully. This caused water leakage and property damage worth hundreds of thousands of dollars. The molecular bonds inside Poly B piping are unstable casusing the pipe to crack under certain environmental strains. The following scenarios speed up the deterioration process of the piping.

- High chlorine content in the municipal water supply.
- Prolonged exposure to UV light.
- Exposure to high heat areas or high temperatures.

What is the Failure Rate?

If you are looking for a short answer, it is 100%. It is not a question about if it will fail; but **when** it will fail. The different factors involved with the deterioration of the piping make the exact time frames impossible to determine. Here are some notable factors in determining the failure rate of Poly B™ piping:

- **Where was the pipe manufactured?**
  If the piping was manufactured in a hotter climate, the rate of failure increases instead of a colder setting. We know that high heat is a critical factor in the deterioration of the piping.

- **How was the piping transported?**
  Was the piping transported in a closed semi-trailer or an open flatbed? UV light during the transportation increases the failure rate of the piping.

- **How was the piping stored?**
  Often, the piping was stored outside in the sun until the tradesmen were ready to install it into a home. Exposure to weather elements and UV light would cause quick deterioration of the piping.

- **What was the original installation process?**
  New home building companies working with large contractors typically deliver all of the materials for an entire block of houses at one time. These materials are placed either on the driveway or inside the garage while the teams work through home by home. Poly B piping may have been exposed to UV light and temperature changes for months before even being installed in the home, causing a higher failure rate.

- **Is it used in a well water supply system or a high chlorine municipal setting?**
  The higher the potency of chlorine in a water system, the faster the pipe will deteriorate.

With all of these factors considered, there is no way to determine exactly when a polybutylene piping system will fail. We know that the event of the first leak is a tell-tale sign that the entire home's piping system is on its way to failure. The longest we have seen the piping last for is 34 years, and the fastest we have seen it fail is within the first 12 months. This is the reality of what we're delaing with when it comes to Poly B piping.

Lawsuits, Litigation, and Insurance

When was Poly B™ Banned?

There are 2 different dates on which polybutylene piping was banned.

The use of Poly B™ was banned by the National Plumbing Code, which oversaw all plumbing trades in Canada and refused to recognize Poly B™ after 1997. The pipe was disallowed to be used to construct any building requiring piping systems.

The government of Canada officially banned Poly B™ in 2005. The ban's reasoning was that a substantial volume of lawsuits were filed against Shell and Dupont over structural damage and property damage caused by ruptured Poly B™ piping throughout hundreds of homes. Poly B™ was reported to be failing after a few years of installation. This resulted in structural damage to drywalls, water damage, and costly restoration. Shell and Dupont lost the lawsuit.

Poly B™ Lawsuits and Litigation History

Combined class-action lawsuits made Poly B one of the highest pre-settlement lawsuits in North American history. The total combined lawsuits amount to multiple billions of dollars.

Poly B™ Insurance Coverage

Poly B piping has proven to be a huge liability for both homeowners and insurance companies. In 2005, the Supreme Court of Canada deemed Poly B inadmissable to indemnity clauses. This means that no insurance company is required to ensure a home with Poly B piping under law.

Until recently, most insurance companies have offered grandfather clauses to current customers with Poly B piping and leniency to new clients. However, because of the losses incurred by insurance companies, most of them are no longer willing to renew policies or insure new clients that come to them with Poly B in the home. Legally, they do not have to because of the Supreme Court's ruling in 2005.

Buyer beware, if an insurance company does offer to insure the home, there are typically massive premiums and costly deductibles following a first leak.

Real Estate and Poly B™ Piping

There is a boom in BC's real estate market with decade-low housing supply and historically low-interest rates. This means that houses are moving regardless of Poly B™ piping, and many buyers and sellers may be caught off guard if they are unaware of the Poly B™ piping in the home and the risks involved.

Buying a Home with Poly B™

As a buyer, if you have found a home, but it has Polybutylene installed, you may feel discouraged about buying the house. Most houses built in the 80s and 90s are top-quality builds and are often located in highly desirable neighborhoods with great amenities. A quick remediation will have your new home in tip-top shape and give you peace of mind that your domestic water plumbing system is worry-free for years to come.

However, it is important to mention that sellers do not repipe homes before putting up their properties for sale. Before you complete the purchasing contract with the seller of the home with Polybutylene piping, inform your real estate agent to tell the seller to either:

-Replace the Poly B piping.

-Reduce the selling price of the home to allow you to replace the Poly B pipes before you move in.

-Oftentimes, a seller will meet you halfway on the remediation of Poly B piping.

Selling a Home with Poly B™

If you are selling a home with Poly B piping, you may be faced with an educated buyer who is aware of these Poly B issues, and this person may be unable to get home insurance upon purchasing the home.

There are typically three options...

1. Replace the Poly B piping before selling the home.
2. Face a buyer asking for unrealistic discounts to cover the remediation costs.
3. Deal with potential buyers walking away from a home because they simply to not want to deal with the hassle of replacing the piping in the home upon purchasing or be unable to accommodate the remediation itself.

Poly B™ and Home inspectors

A qualified home inspector should be familiar with Poly B and the piping risks in a home. They should not implement scare tactics but educate the homeowner on the risks and educate them on their options in dealing with it.

The Poly B™ Replacement Options

Installing a new plumbing system into a building requires adequate knowledge about the right material for performance, efficiency, safety, and durability. Different types of pipes are available for piping purposes, and they each come with a different estimated life expectancy. Here is a list of available home piping options.

Class C PEX Piping (Low-Grade)

• This type of pipe is commonly found in big box home improvement stores and was the first type of PEX piping released on the market.
• This PEX is only rated for 80-100psi.
• Can come color-coded.
• Class C PEX has low resistance to high heat and will commonly burst if frozen.
• Estimated life expectancy is 50 years.

Class B PEX Piping (Mid-Grade)

• Class B PEX is the pipe most plumbers refer to as " PEX" likely because of lack of training and because it is regularly accessible through typical plumbing suppliers.
• Ratings for Class B PEX range from 100 - 110 psi.
• The pipe is cross-linked and has adequate freezing and heat-resistant prevention qualities.
• Class B PEX can be ordered in an O2 Barrier tubing for in-floor heat applications.
• Estimated life expectancy is 50 years.

Class A PEX Piping (High-Grade)

• Class A PEX is the highest-rated PEX piping available on the market.
• In its most advanced grade, this pipe can handle up to 497 psi.
• Top manufacturers warranty piping for up to 25 years.
• With a cross-linked development process, this PEX piping can withstand multiple occasions of freezing and extreme heat applications.
• Class A PEX can be ordered in O2 (oxygen barrier), making it the perfect PEX for in-floor heating applications and domestic water lines.
• Estimated life expectancy is 100+ years.




Poly B™ Contractors

Poly B™ remediation or replacement requires the services of expert craftsman in four professional trades:

Plumbers, Tapers, Painters, and Texturers

Responsibilities of Poly B™ Contractors

- Plumber – removes and installs new water lines during the Poly B™ replacement process.
- Taper – seals joints between wallboard and plasterboard and repairs holes cut in drywall and ceiling to prepare the wall surface for painting.
- Painter – paints the work area to become similar to the other parts of the house.
- Texturer – textures the ceilings to match the home.

However, with all of these trades involved, it opens up the door for problems, such as:

- Poor communication
- Delays in service
- Inaccurate quotes
- Unfinished work
- Missed deadlines
- Poor craftsmanship
- Insurance issues

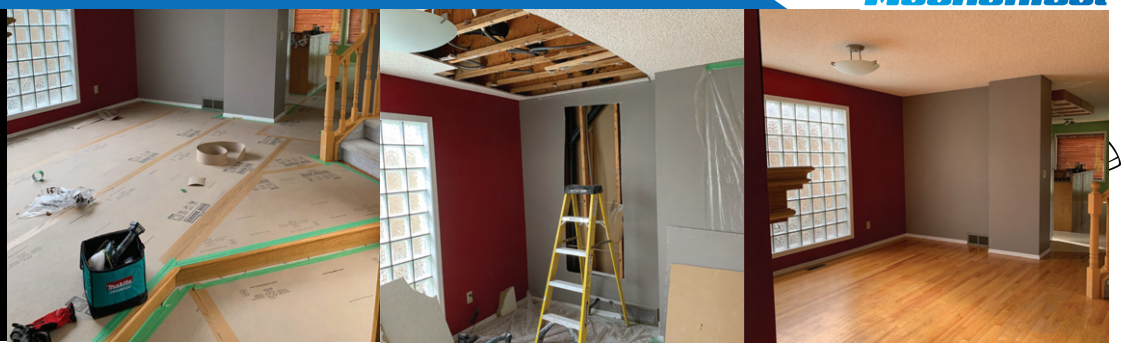
Why is the Experience so Important?

Hiring an experienced contractor is invaluable especially when replacing Poly B™ piping because:

- The right contractor should know your home without visiting, have access to blueprints, and be able to give you an estimate over the phone in 5 minutes in most cases.
- The contractor should complete the Poly B™ remediation project as scheduled by meeting pre-scheduled deadlines.
- Quality craftsmanship that guarantees 100% replacement of all active Poly B™ inside of the home.
- Proper team qualifications, critical thinking, and communication.

Replacement Process

This is how we at Tyee Mechanical approach a Poly B remediation project.



Protect the home

It is important to protect your property against dust and debris that will be generated when tearing your walls, your flooring, carpets, furniture, and other belongings should be covered before starting Poly B remediation

Begin Replacement

The remediation process will start by checking the pipes buried in the drywall, following these steps:

Cut holes in drywall and ceiling.
Remove the active Poly B piping
Replace with new piping.

Clean Up

We'll clean up the workspace and remove all old piping and debris. Our goal is to leave the work area completely mess free.

Have Questions About Poly B™ Piping?

Feel free to contact Tyee Mechanical with any questions that you may have regarding Poly B™ Piping.

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