

Pipe Lining Versus Replacement: What To Consider



Do you have a stormwater pipeline that is draining slow or obstructed? Do you have a sewer line as collapsed or severely deteriorated?

Before deciding whether the pipeline can be relined or whether it should be replaced, it's important to understand the differences between pipe lining or repair versus replacement.

What Is Pipe Lining?

Pipe lining is a method of repairing damaged or deteriorating pipes without the need for excavation or digging trenches. It typically involves inserting a liner into the existing pipe and then inflating it to create a new, seamless pipe within the old one. This can be done using a variety of materials, such as fiberglass or polyethylene.

In the pipe lining process, your contractor begins by doing an inspection using video cameras to identify the area that needs repair. Depending upon the damage, they may be able to repair the pipe in place or they may need to remove and replace it with a new piece of pipe. After the inspection is complete, a special chemical-resistant epoxy liner is placed inside the existing pipe. This is a liner that is pre-cut to fit the exact dimensions of your pipe allowing for a secure and tight seal. Usually, it takes only a few hours to install a pipe lining and once it is complete, the pipe will be fully operational.

In repairing a section of a sewer pipe that has been damaged by tree roots, by example, the contractor first cleans the inside of the pipe to remove any debris or obstruction. Then, a liner is inserted into the pipe and inflated it using air. This process creates a new, seamless pipe within the old one and effectively repairs the damage and restores the pipe to full function.

What Is Pipe Replacement?

In cases where pipes are too damaged or deteriorated, a full replacement may be the only viable option. This involves complete removal of the existing pipe and replacing it with a new one. Removing an old pipe and replacing it with a new line can be a labor-intensive process and is why this method will often cost more than pipe relining.

Depending on the location of the pipe, this may involve digging trenches to access and remove the old pipe as well as connect the new one.

Pipe Lining vs Replacement

While both pipe lining and pipe replacement have their own respective benefits, it is important to consider which one is the best option for your situation. Here are some of the advantages and disadvantages of each one.

Pipe Lining or Repair

Pros

- More cost effective compared to usual pipe replacement
- Less time to complete
- No digging required
- Less disruption and damage to the surrounding area

- Effective solution for pipe issues often resulting in restoring service life of pipeline

Cons

- Repairs may show regular monitoring
- Not suitable for severely damaged pipes
- Materials used may not be as durable as the original pipe material

Pipe Replacement

Pros

- Reliable and permanent solution to the pipe issue
- Might be the only solution for severely damaged pipes

Cons

- Process is quite expensive and time-consuming
- Involves digging and other construction work
- Excavation can disrupt operational and traffic flow as well as surrounding environment

Regular Maintenance Helps Avoid Costly

Regular maintenance and pipeline assessment helps to identify issues within the system early on which can, in turn, prevent a situation from getting worse and more costly to repair.

In general, it is recommended to have your sewer or stormwater pipelines or system inspected every two years or annually for heavily used or aging systems.

The bottom line:

If you are unsure as to whether pipe lining or pipe replacement is your best option, contact a licensed and experienced contractor, like MCSP, to assess your situation and provide the best solution for your specific circumstances.