

## Identifying Service Line Material

Identifying the material of a service line can be challenging: local plumbing codes vary and different pipe material and fittings were used during different decades. The materials available today were not necessarily available decades ago.



Lead pipe at curbstop. Source: Philadelphia Water

One approach to identifying the material is to physically inspect the piping. Service line pipes may be exposed where the pipe enters the home through a basement wall or floor, at the water meter, or when discovered through excavating the dirt over the service line or where connected to the water main. Water lines are typically 12 inches below the depth soil freezes in a community, meaning that service lines are often three and half feet or more underground and much deeper in northern climates. Consequently, our knowledge of service line materials is only as good as the installation records, subsequent recorded repairs, and inspection of those parts of the service line that can be readily accessed.





While lead is visibly different from other metals routinely used for water pipes, test kits approved by EPA to test for lead paint can be used to test for lead on the surface of service lines. Information on lead testing resources are available at:

- [Occupational Safety and Health Administration: Lead Test Kits](#)
- [National Center for Healthy Housing: Lead Testing Kits](#)

If a pipe is painted, the lead kit will respond to the lead in paint. Be sure to confirm false negative test results using the "Test Confirmation Card" contained in the test kit.

## Visual scratch testing

Lead is a dull gray color and very soft. If scraped with a key it will turn a bright silver color. Even a very strong magnet will not stick to lead.

<p><b>Types of water pipes</b></p> <p>Follow the guidance below or contact a licensed plumber to determine the material of your water pipes. To identify the material of your service pipe material on private property, check your household water service connection, typically located in the basement.</p> <p>Homeowners should identify and replace old household pipes, particularly galvanized plumbing and sources of lead. The type of household plumbing can vary throughout your household.</p>	<p><b>Lead</b> </p> <p>A dull, silver-gray color that is easily scratched with a coin. Use a magnet - strong magnets will <i>not</i> cling to lead pipes.</p> <p><b>Galvanized</b> </p> <p>A dull, silver-gray color. Use a magnet - strong magnets <i>will</i> typically cling to galvanized pipes.</p> <p><b>Copper</b> </p> <p>The color of a copper penny.</p> <p><b>Plastic</b> </p> <p>White, rigid pipe that is joined to water supply piping with a clamp.</p>
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DC Water: Understanding Your Water Service Pipe

More information concerning testing and identifying service line material is available at the following links:

- [EPA: Advice to Chicago Residents about Lead in Drinking Water](#)
- [DC Water: Guide to Identifying Household Plumbing](#)
- [Cincinnati Water: Visual Scratch Test \(video\)](#)