



Consulting, Resource, Education, Training, and Support Services for Home Inspectors
"A candle loses no light when it lights another candle."

Galvanized Steel Potable Water Pipe

The serviceable life of galvanized steel water piping varies from approximately thirty to sixty years depending on the composition (hardness) of the water and, to a lesser extent, the demands placed on the system. Over time, the normal processes of internal corrosion and mineral accretion or build-up on the inside of galvanized steel water piping will reduce its inside diameter and can result in reduction of water flow, damage to the internal components of valves, and clogging of shower heads and faucet aerators. In addition, an initial flow of rusty colored water may be discharged from water taps when they are first opened. Galvanized steel piping should not be connected to copper or brass piping materials or fittings without the use of dielectric couplings and fittings to reduce the potential for damage to the galvanized steel materials through the process of galvanic corrosion.

Two photos of corrosion on the interior of galvanized steel water pipe



Indications that galvanized steel water pipe is approaching or at the end of its service life are: pinhole leaks or corrosion on the exterior surface of the pipe where pinhole leaks have temporarily self-sealed from mineral accretion/build-up, reduction in water flow, and/or the regular discharge of rusty colored water each time a tap is opened.

When these conditions are not present at the time of the inspection and are not noted in the inspection report, it is recommended that the galvanized steel water piping system be monitored for these conditions. Should such conditions become evident, it is recommended that a **QUALIFIED** plumbing contractor be retained to examine the entire potable water piping system for any necessary modifications or corrective measures up to and including replacement of the entire potable water distribution piping system with modern materials.

When any of these conditions are present and noted in the inspection report, they are **IMMEDIATE ACTION** conditions and, therefore, it is recommended that a **QUALIFIED** plumbing contractor be retained to examine the entire potable water piping system for any necessary modifications or corrective measures up to and including replacement of the entire potable water distribution piping system with modern materials.