9 Types of Utility Pipes Explained

**WOOD**
- Dates in Use: 1700s–1900s
- Lifespan: Decades
- Pro: Trees were readily available at the time of use
- Con: Low pressure
- Fact: Hollowed out wood logs were an early form of sewage conveyance

**CAST IRON**
- Dates in Use: 1700s–1900s
- Lifespan: 100–150 years
- Pro: Non-corrosive
- Con: Susceptible to failure due to freezing or earth movement
- Fact: Cast iron pipes shrink in size and capacity as corrosion forms

**VITRIFIED CLAY**
- Dates in Use: 1900s–today
- Lifespan: 100–150 years
- Pro: 95% recycled
- Con: Susceptible to I/I due to joint construction
- Fact: Vitrified clay pipes are ideal for use when there is a high likelihood of corrosion

**CONCRETE**
- Dates in Use: 180 B.C.–today
- Lifespan: 150 years
- Pro: Durability & strength
- Con: Susceptible to H2S attacks
- Fact: Part of Rome’s concrete sewer system is still intact after 2,000 years

**DUCTILE IRON**
- Dates in Use: 1940s–today
- Lifespan: 100 years
- Pro: 95% recycled
- Con: Susceptible to corrosion
- Fact: Can deform and remain strong as ground settles

**FIBERGLASS**
- Dates in Use: 1940s–today
- Lifespan: 25–50 years
- Pro: Very high strength to weight ratio
- Con: High upfront cost
- Fact: Can withstand a wide range of conditions, from extreme cold to extreme heat

**POLYETHYLENE PE**
- Dates in Use: 1950s–today
- Lifespan: 100 years
- Pro: Non-corrosive
- Con: Proper installation a must
- Fact: Used for natural gas, water, sewer, storm-water, electrical conduit, geothermal, and drainage

**PVC**
- Dates in Use: 1950s–today
- Lifespan: 110 years
- Pro: Low failure rate
- Con: Can’t use above 305 psi
- Fact: Very high tensile strength. Good where ground movement is anticipated

**STEEL**
- Dates in Use: Early 1800s–today
- Lifespan: 40–70 years
- Pro: Pressure resistant
- Con: Susceptible to corrosion
- Fact: The country’s most recycled material. Therefore contributing to a project’s LEED certification

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To discuss the best type of pipe to use in your project, contact Greg Anderson at Ganderson@SEHInc.com

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