

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 H ₂ S 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 Municipalities moved from cast iron pipes to ductile iron because of its corrosion resistance
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 Has a very high tensile strength and is good for situations where ground movement
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

TO DISCUSS THE BEST TYPE OF PIPE TO USE IN YOUR PROJECT, CONTACT GREG ANDERSON AT [GANDERSON@SEHINC.COM](mailto:ganderson@sehinc.com)