

PEX: The Logical Choice for Plumbing Systems Compared to Copper Pipe

When it comes to plumbing a home or building, builders, installers, and owners agree — crosslinked polyethylene (PEX) pipe is the most durable, cost-effective, and logical choice.

Flexible

PEX pipe offers the tightest bend radius of any plumbing product on the market — as little as 3½" for ½" pipe. This eliminates the need for fittings and connections with each change of direction, and fewer fittings reduce your liability for leaks and problems.

Durable

The re-pipe business has never been better with all the pinhole leaks in copper caused by harsh-water conditions. Because PEX resists the damaging effects of harsh-water conditions, it is usually the top choice for re-pipe jobs.

Reduced Liability

In addition to fewer fittings for reduced liability, PEX pipe cannot be dry fit (when using ASTM F1960 ProPEX® expansion connections). This eliminates any concern of leaks and blow offs from dry fits.

Resists Freeze Damage

Because PEX pipe can expand and contract, it is less susceptible to freeze damage compared to rigid copper pipe. In fact, the Plastics Pipe Institute (PPI) published a technical report in 2020 (TR-52) that revealed the resiliency of PEX in freezing conditions.

Source: <https://plasticpipe.org/common/Uploaded%20files/Technical/TR-52.pdf>

Sustainable

In August 2016, the Journal of Cleaner Production published a report based on the life cycle assessment comparing the economic and environmental performances of PEX and copper pipes over the life cycle of a student housing project in Lancaster, Penn. The results of the analysis indicated using PEX instead of copper piping systems would considerably reduce the total cost of the building up to 63% over its life cycle while significantly reducing the carbon dioxide (CO2) emissions by approximately 42% and lessening the negative effect of environmental impacts to land, water, and air.

Source: https://www.researchgate.net/publication/305823758_Environmental_and_economic_life_cycle_assessment_of_PEX_and_copper_plumbing_systems_A_case_study



Uponor Logic Makes Sense

Uponor Logic is the smart way to plumb, using flexible Uponor PEX pipe and multiport tees to minimize connections and maximize system performance. With an Uponor Logic layout, plumbing systems typically require fewer fittings than a trunk-and-branch design and less pipe than a home-run design.

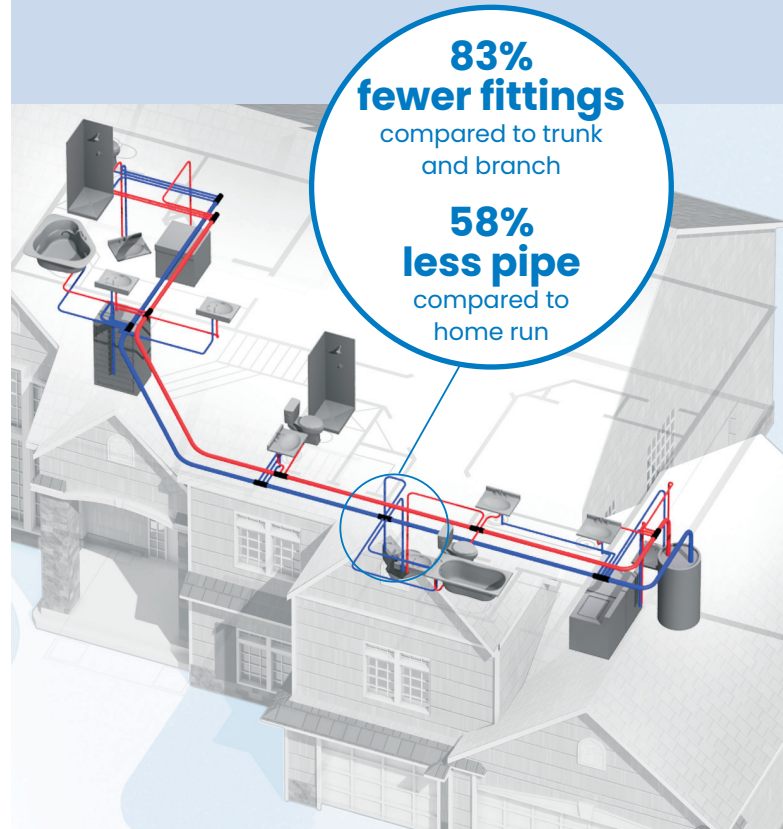
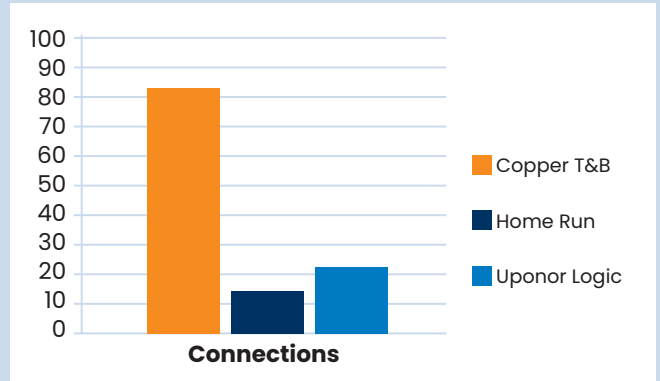
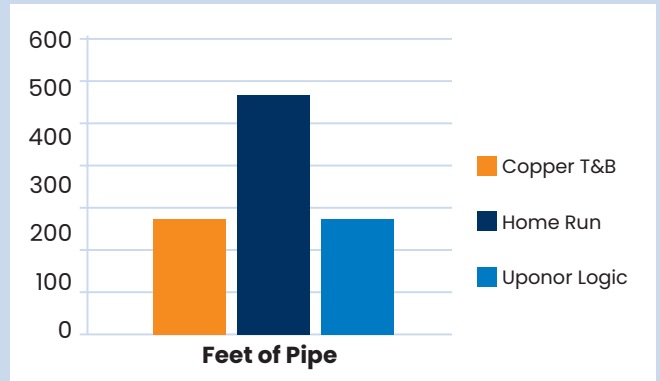
Note: The charts at right are based on a residential dwelling with a kitchen and two bathrooms.

Comprehensive Offering

PEX pipe and fittings are available in sizes from ¼" up to 3" to meet any application need.

Safe for Your Plumbing System

Best of all, PEX pipe is tested in accordance with NSF/ANSI/CAN Standard 61: *Drinking Water System Components—Health Effects* and meets or exceeds the health requirements for potable-water products in the U.S. and Canada.



> Learn how Uponor can help drive your business forward at [uponor.com](https://www.uponor.com).

Uponor Inc.
5925 148th Street West
Apple Valley, MN 55124 USA
T 800.321.4739
F 952.891.2008

Uponor Ltd.
6510 Kennedy Road
Mississauga, ON L5T 2X4 CANADA
T 888.994.7726
F 800.638.9517

Uponor

Moving > Water