



SUSTAINABILITY MATTERS

Selecting the right company matters and how you design today will matter tomorrow. Sustainability starts with a professional design, high-quality insulation materials, and exceptional installation of the piping system.

For nearly a century, PERMA-PIPE has been at the forefront of engineering solutions to deliver sustainable district energy systems for below or above ground steam, hot, and chilled water applications. Our energy-efficient systems are comprised of a customized design with pre-insulated pipes, field joints and fittings, and factory-fabricated manholes. The PERMA-PIPE district energy systems maximize thermal efficiency in the transfer of energy, resulting in end-user cost savings and a substantial contribution to a sustainable environment. More energy-efficient systems can help reduce energy consumption in buildings, while protecting the environment.

PERMA-PIPE district energy systems can include:

- Efficient thermal polyurethane (PUR) or high operating temperature aerogel insulation materials.
- PUR, a closed-cell insulation material directly bonded to the pipe, which mitigates corrosion under insulation.
- A metallic diffusion barrier is used to ensure stable thermal properties for the pipe's service life.
- A watertight high-density polyethylene (HDPE) or fiberglassreinforced polymer (FRP) outer jacket resists damage during installation and operation.
- For high-temperature systems, PERMA-PIPE provides a drainable, dryable, testable (DDT) insulated solution.

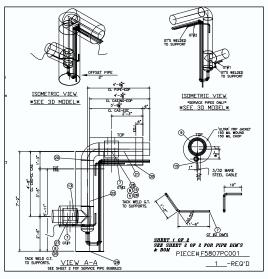
- Custom-fabricated steel manholes prevent underground systems from groundwater infiltration, overflow, and reduce system maintenance.
- Optional PermAlert® leak detection to mitigate system failures.
- ISO-certified quality assurance system includes testing and traceability conducted on all piping systems to improve quality control and reduce future risk.
- Factory-trained professional field technicians, regionally located, are available to provide training, installation guidance, and system maintenance.

WORLD-CLASS ENGINEERING SOLUTIONS

We work with our partners to deeply understand and align our capabilities with your requirements. The PERMA-PIPE team offers technical advice from start to finish, no matter how complex the project requirements. The end goal is to give you, our partner, peace of mind by delivering the highest quality and most energy-efficient district energy system at the lowest total cost of ownership.

Our knowledge and capabilities in the global district energy market stems from decades of providing highly engineered solutions. PERMA-PIPE offers products and services that our preferred partners have come to trust. Partnering with PERMA-PIPE goes beyond the piping systems.







APPLICATIONS: Universities | Commercial Buildings | Airports | Hospitals | Military Installations | Municipalities

WORLD-CLASS ENGINEERING SOLUTIONS TO DELIVER SUSTAINABILITY IN DISTRICT ENERGY SYSTEMS

PERMA-PIPE delivers the highest quality, reliable, economical, efficient, and environmentally sound district energy systems to lower your total cost of ownership.







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