

Insulation of PEX Tubing

PEX tubing is being used more frequently for solar heating and remote boiler systems. Runs of 50 to 200 feet are typical. PEX tubing is available in sizes ranging from 1/4" to 2" nominal pipe size. PEX O.D.'s are the same as copper pipe (types L, K) and would use the same insulation sizes.

Many applications using PEX are direct burial applications which are above the water table and above the frost line. Some burial applications call for PEX supply and return lines to be insulated separately and the insulated lines run together through a PVC pipe. For these applications it is important to calculate PVC pipe size requirements using the maximum insulation O.D.'s allowed within our manufacturing tolerances. Installers should consult with Nomaco Insulation regarding their specific applications for correct sizing as well as insulation thickness recommendations for freeze protection and heat loss.

There has been some confusion in the marketplace regarding insulation requirements when using PEX tubing. The building, plumbing, mechanical and energy conservation codes base insulation requirements on the type of system (e.g. domestic hot and cold water, hot water heating, etc.). These requirements apply regardless of the piping material. PEX is treated the same as copper, iron, PVC or CPVC for the same end use. PEX tubing does not provide any significant thermal insulation properties and would not meet code requirements without additional insulation.





