

INSULATING ELLS AND P-TRAPS WITH K-FLEX ELASTOMERIC INSULATION

Flexible closed cell insulation products are ideal for insulating new pipe work that has not been closed. The insulation can be slid onto the pipe, eliminating most longitudinal seams. This is the fastest way to install the product. The flexible insulation easily slides along straight runs and also around long radius drawn bends. Ease the insulation along the pipe work by pushing, never pulling.

For optimum performance, 90° bends and P-Traps should be fabricated, either in the field or at the factory (K-Fit® prefabricated fittings). Insulation that is slid around a 90° bend rather than mitered to fit will be under stress, causing the insulation wall thickness to be reduced by as much as 40%. This reduced insulation thickness may result in condensation formation at the bend on below ambient applications. In addition, this practice greatly increases the stress on the insulation outer skin, which could result in surface cracking.

P-Traps are similar to 90° bends in recommended fabrication practices. Sliding insulation around a P-Trap results in even greater stresses being applied to the insulation. P-Traps can be fabricated from a single miter or ideally with two miter sections. P-Traps often create another difficulty in that there is limited space between the pipes to be insulated. It is often difficult to use 1" wall thickness in these applications for this reason. A 3/4" wall thickness will be sufficient to prevent condensation on 1-5/8" copper lines with -20°F refrigerant at 60% relative humidity and 90°F ambient temperature. For more severe conditions, special fabrication techniques will be required.

It is a common practice to slide flexible insulation around 90° bends and P-Traps in an effort to eliminate seams and speed up the installation process. This technique has been used successfully with wall thickness of 3/4" and below. Avoid this practice with 1" wall and greater. The use of miter cut fittings is recommended with seam seal products of all wall thicknesses.

K-Fit® factory-fabricated fittings are available in all IDs and wall sizes (black or white). K-Fit® fittings include 45s, 90s, Tees, P-Traps, and grooved fittings.

The K-Flex Installation Manual and application specific Installation Guides are available for more information.