

**IMPORTANT INSTALLATION INSTRUCTIONS: VEE EXPANSION / SEISMIC LOOPS**

Piping should be lined up accurately before installing the Vee Loop. Angular, lateral, axial misalignment, and / or torque, will cause shearing stresses. The system must be piped to eliminate misalignment at the Vee Loop. Be sure the face to face opening between the pipeline end fittings is the proper dimension for the Vee Loop.

On copper sweat Vee Loops, use care to direct the flame away from the braid and the factory brazed joints. A heat sink wrapping, cold pack, or other device should be used to dissipate the heat. Use a soft solder. Do not exceed 950° F installation temperature or you will weaken or damage the factory brazed joints. Be sure to clean up all flux residue to prevent corrosion and premature failure.

**NOTE: THE MANUFACTURER'S WARRANTY IS NULL AND VOID IF THE VEE LOOP CONNECTOR FAILS BECAUSE OF EXCESSIVE INSTALLATION TEMPERATURE OR FLUX CORROSION.**

Vee Loops 2 1/2" and larger, not installed with the "V" shape hanging straight down, must be supported at the Vee Loop 90° Ell with conventional pipe hangers or supports. Install the hangers or supports so they don't restrict the movement of the Vee Loop. The Vee Loop must be free to move in order to function correctly.

When Vee Loops are used to absorb thermal expansion and contraction, good piping practice recommends concentric pipe guides be installed on the pipeline at the unanchored side(s) of the Vee Loop, as with any expansion joint. The guides keep the piping on centerline. Piping may need to be anchored to direct thermal movements into the Vee Loop.

The Vee Loops may be installed in any configuration along the centerline axis of the piping run, vertical up or down, horizontal side to side, and anywhere in between, as long as the piping movement is directed into the flexing capability of the Vee Loop. Vee Loops may be nested for parallel multiple piping runs. Be sure to leave enough room between the parallel pipes to accommodate hanging hardware and for free movement of the nested Vee Loops.

For steam applications, the Vee Loop must be installed and supported horizontally, on the same plane as the pipeline, in order to prevent harmful condensation from collecting in the Vee Loop 90° ell. Don't install the Vee Loop hanging up or hanging down for steam applications.

Leave any angle iron bars or shipping blocks in place during handling and installation. After the Vee Loop and any piping anchors and guides are installed, but before the system is pressurized, remove the angle iron bars or shipping blocks.

If you're doing any welding near or above the Vee Loop, cover it with a chloride free, heat resistant protector, to prevent arc strikes, weld spatter, etc. from damaging the Vee Loop.

Never install a Vee Loop where its temperature, or pressure, or movement ratings could be exceeded. Be sure you know all the temperature, pressure, and movement ratings of the Vee Loop and of the system.