



Buried Installation Guidelines



It is important to note that underground insulated pipe system depends more upon workmanship than specifications. There is no cheap way of doing underground insulation work. Doing it right First time is the least expensive in the long run.

Site Preparation.

The pipe will be buried to a depth so that vertical loads will not damage the pipe or insulation system.

The work and pipe insulation shall be dry prior to and during installation of the jacketing system. The ambient temperature shall be above 5°C.

Jacket Preparation.

Underground applications require a secondary layer underneath the PVC such as foil facing.

Never use Asphalt products and PVC together. The PVC will slowly dissolve.

Exceptional workmanship is required to seal permanently the entire system, especially the fittings.

The insulation must be rigid to resist external loads. There can be no voids between the insulation, jacketing and fitting covers.

On hot service piping no gaps are permitted in the insulation which would expose the PVC Jacket to excessive high temperatures. The insulation system on pipe and fittings shall be

designed to limit the outside surface temperature to 43°C. Do not apply PVC jacketing near adjacent hot piping. This procedure will prevent undue softening of the PVC jacket

On cold service piping the insulation should be appropriate to prevent condensation and sweating on the jacket.

Overlap PVC jacket with seams as supplied by factory. Stagger the outer layer seams from the secondary inner layer seams.

Install overlapping seams of each layer at 10 - 2 o'clock for better visual inspection while waterproofing seams shut with solvent.

When dry apply minimum 36mm wide Insulock PVC tape or approved equal to welded seams.

Pipe Supports.

Where pipe supports are outside the insulation system, the Engineer shall provide a proper design to prevent crushing the insulation and jacket. Where the support is directly on the pipe, the entire area around the support and insulation system must be properly

sealed with a heavy coating of approved plastic silicone adhesive. On cold service the support or projection must be insulated, jacketed and sealed with the pipe.

Provisions must be made within the underground system for any expansion / contraction problems.

Burying the pipe.

To maintain the integrity of the pipe and insulation system it is incumbent to fill the trench surrounding the pipe with sand that is free of rocks and debris. It should also be compacted to provide an evenly distributed load.

Do not bury the piping for at least 2 days after the PVC work is completed so as to allow solvents to evaporate. Consideration should be given to the application of a 75mm thick (minimum) mortar mass over all underground insulated and jacketed fittings to further protect and reinforce these critical areas from cracking.

Insulock A30 jacket is recommended for the use in underground industrial applications as long as it is installed in the correct method as outlined.