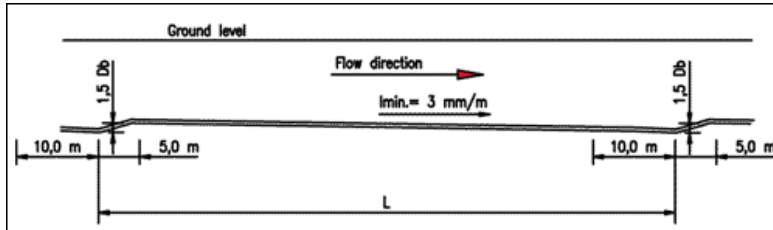


Piping & profiles

The piping

The piping in a vacuum sewage system must be completely leakproof. The best material to be used is PEH since electro fusion welding or butt welding afford a perfect vacuum seal. This welding technology also facilitated the production of pipe fittings specially adapted to vacuum applications. Another choice of pipe material is PVC. For this material shall be used in principal solvent.



Vacuflow profile

The pipes are laid in a 'sawtooth' profile with a gently downsloping run of 50-70 m, in the direction of flow, followed by a 1-5 m upward run which takes the level up approximately 1.5 times the inner diameter of the pipe. The 'sawtooth' profile also enables 'pockets' of liquid to form. These 'pockets' of liquid are progressively transported by the air introduced at each interface unit, in direction to the central sewage collecting tank or Ejector pump station.

This profile, The Vacuflow Profile, is the key to a reliable system. The Vacuflow profile generates:

- * high acceleration with minimal acceleration losses
- * high lifting capacity with minimal lift losses
- * high flow capacity with minimal friction losses
- * good directional effect without the use of check valve

The whole secret to the reliability of the vacuum sewage system is based on locally generating high accelerating and self cleansing velocities without the use of tremendous amounts of energy.

