



GeoHeader® Installation Instructions

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1. Excavate header trench to engineering plans' specified depth and in accordance to the correct header design layout. Be sure to follow state and OSHA safety regulations for working in an open cut trench.
2. Unroll 2" and smaller GeoHeader circuit piping in the header trench at opposite ends of the trench in a reverse return fashion. If required, heat-fuse 3" and larger straight sections together and to the two inch and smaller circuit piping (proper butt fusion equipment and procedures required). The straight sections are factory cut to length, so no additional measuring or cutting should be required.
3. Begin heat fusing the vertical heat exchanger (VHE) pipe ends to the corresponding branches of the GeoHeader piping. Take care not to kink VHE piping at the borehole exit point while bending it into the header trench. It is recommended that bending radius of the VHE pipe should be no less than 25 times the diameter of the VHE pipe (example 1" pipe would have a minimum bending radius of 25").
4. Once all the heat fused connections are made, the entire circuit should be pressure checked for leaks before burial. Our recommendation would be to hydraulically pressure test each circuit with water at a minimum of 100 psi for a period of no less than 4 hours. Do not to exceed more than 1 ½ times the working pressure of the pipe (considering the static column pressure at the bottom of the VHE piping) and do not exceed the working pressure of the pipe for more than 8 hours. When initially charged, let the water temperature stabilize before beginning pressure testing. When initially pressurized, the HDPE pipe will relax and expand in diameter slightly lowering the pressure. Equilibrium is typically reached in 2 to 3 hours and the pressure stabilizes. If there is no significant pressure drop for the next 2 hours after the pressure stabilizes the circuit should be leak free.
5. After the circuit is successfully pressure checked the GeoHeader piping can be backfilled. If onsite backfilling material is to be used, take care to ensure that no large rocks, soil clumps or jagged material comes in contact with the circuit pipe causing damage. A 12" in depth granular (sand) bedding encasing the circuit piping is preferred.
6. Be sure to follow engineering plan specifications pertaining to soil compaction and the utilization of warning tape and/or tracer wire.

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