Homeowner No Longer Worries About Equipment Failure

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The owners of this existing suburban home in Ft. Smith, Arkansas turned to Oren Atchley Company and EarthLinked Sales Rep Dan Bandimere of EnviroGuard Drilling to solve their dilemma of failure prone equipment and high energy bills.

The EarthLinked® Direct Exchange system was selected because it was the only system capable of providing heat/cool and hydronic water from a single compressor unit—necessary because of the limited access for the geothermal loops and the 800 sq. ft. of hydronic radiant floor.

The home's perfectly manicured zoysia lawn provided a true test of EnviroGuard's drilling capability. A sod cutter was used to remove an 8'x10' ft. area of lawn.

The use of small bore drilling equipment enables the installer to access almost any size/shape lot to drill the required 3-inch diameter holes, 100 feet deep diagonally within the manifold pit.

A 3-feet wide by 4-feet deep manifold pit was created with an auger that Quick Connects to drilling equipment.

The DIRECT AXXESS® copper earth loops were brazed and pressure checked to 400 psig with dry nitrogen. The line sets were then connected to the compressor/air handler and the entire system evacuated to 400 microns, before charging with refrigerant.

Sand is used to carefully backfill the manifold pit, stabilizing and protecting the earth loop manifolds before the top soil and original sod is replaced.

Separate heat exchangers provide hot water for radiant in-floor system and domestic hot water.

The compact compressor unit is located on the existing equipment pad.