



Brown County Rural Electrical Association

24386 State Hwy. 4
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Ground Source Heat Pump

A Geothermal or Ground Source Heat Pump is one of the most efficient ways to heat and cool your home. The Geothermal heat pump utilizes the earth as the medium from which heat is extracted. Water is pumped through a heat exchanger into the heat pump where the heat is extracted. The water is then returned to the ground, either through discharge in a drain field or through a closed earth loop system. Ground temperatures do not vary as dramatically as outside air temperatures do. The heat available for transfer as well as the unit's operating efficiency remains relatively constant throughout the winter. At depths of 6 feet or more below the ground, the soil maintains a year-round temperature of about 46-degree F to 50-degree F in this region. In the summer, it is cooler than the outside air.

A ground source heat pump qualifies for a special rate when placed under load management with a non-electric or storage backup heating system and cycled air conditioning.