

REPLACING TRADITIONAL FURNACE WITH GEOTHERMAL

Average Utah home installs geothermal heat pump for only \$2,000 more than traditional furnace and cooling system

GEOTHERMAL TO REPLACE AN OLD FURNACE

Randy Satchwell is a numbers guy. Having worked as an accountant for nearly 3 decades, he can look at the dollars and cents of any given project and tell you if you have a smart investment. It was through that perspective that he and his wife Kris Satchwell decided to invest in a ground-pump geothermal system to heat and cool their home in addition to supplementing their hot water heat.



The Satchwell's have lived in their home for 18 years.

COMPARING APPLES TO APPLES

The Satchwell's were facing a common problem - their furnace was getting old and needed to be replaced. In researching replacement furnaces, Randy Satchwell wanted to utilize a technology that would help keep utility costs down. Randy found that for about \$2,000 more, he could install geothermal heat pumps rather than a traditional furnace/central air-conditioning unit, thus reducing his overall energy bills long-term, and keep his energy costs relatively stable. "You have to compare apples to apples. When I looked at the projected energy savings in comparison to the cost of natural gas and electricity, it was a no brainer."

At-a-Glance

- Home size: Approximately 4,000 sq. feet
- Annual energy costs before geothermal: \$2,400
- Projected energy costs after geothermal: \$1,120
- Projected return on investment: 3-4 years
- Cost of system: \$24,443
- Tax credit: \$9,333 (30% Fed & \$2K State)
- Total Investment \$15,110



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TURNING UP THE HEAT WHILE BRINGING DOWN THE BILLS

Kris Satchwell doesn't just prefer a warmer house, she physically requires one. Living with a condition called Raynaud's disease her circulation is affected when temperatures go below about 70 degrees, causing her hands and feet to be discolored. Prior to the geothermal pump, the Satchwell household was generally at a 68-degree temp, often an uncomfortable temperature for Kris Satchwell. Since the geothermal pump came online, the Satchwell house is at a constant 75 degrees, and yet their utility bills have decreased despite the temperature hike. In addition, the Satchwell's enjoy very consistent energy bills, despite their pleasantly inconsistent household size. Active foster parents, the Satchwell's have a household size between 4-6 people at any given time. Given their hot water usage and electric usage fluctuates depending on household size; they still enjoy relatively stable energy costs through their geothermal heat pump.