UNDERSTANDING THE FEDERAL TAX INCENTIVES for RESIDENTIAL GEOTHERMAL HEAT PUMPS
The Energy Credit
In October 2008, geothermal heat pumps were added to section 25D of the Internal Revenue Code. This created a 30% tax credit for costs associated with qualified geothermal equipment “placed in service” through the end of 2016. Property is usually considered to be placed in service when installation is complete and equipment is ready for use. However, if the system is part of the construction or renovation of a house, it’s considered placed in service when the taxpayer takes residence in the house.

- 30% of total system cost
- No limit to credit amount for 2009 and beyond
- Can be used to offset AMT tax
- Can be used in more than one year
- Can be combined with solar and wind tax credits
- Can be combined with energy efficiency upgrade credits

What’s Eligible
Geothermal equipment that uses the stored solar energy from the ground for heating and cooling and meets ENERGY STAR requirements at the time of installation is eligible for the tax credit. Covered expenditures include labor for onsite preparation, assembly, or original system installation and for piping or wiring to connect a system to the home. The structure must be located in the United States and used as a residence by the taxpayer, although primary residency isn’t required. In fact, if geothermal is installed in more than one home, there’s no limitation on the number of times the credit can be claimed.

What’s Not
The credit can’t be claimed for spending on equipment used solely for hot tub or pool conditioning, nor on previously used equipment. As of November, 2013, electric strip heat and ductwork distribution systems are no longer included in the 30% calculation.

How to claim the Credit
Use IRS Form 5695 to claim the Residential Energy Efficient Property Credit. For property placed in service after 2009 there’s no limit on the credit amount. The tax credit can be used to offset both regular income taxes and alternative minimum taxes (AMT). If the federal tax credit exceeds tax liability, the excess amount may be carried forward into future years. Spending on geothermal heat pump property adds to your home’s cost basis but also must be reduced by the amount of the tax credit received.

Non-Business Energy Property Credit
The Non-Business Energy Property Credit is a 30% tax credit (up to $1,500) for spending on qualified energy efficiency improvements made to an existing home between 2009 and 2010. This credit is for improvements on insulation, windows, doors, and solar reflective roofing materials and can be claimed in addition to the Energy Efficiency credit for geothermal property. The improvements must be for a dwelling in the United States that’s owned by the taxpayer and used as the principal residence. IRS Form 5695 is used to claim the credit. This credit has been extended to include 2011 but limits the amount of the credit to $500. The taxpayer is ineligible for this tax credit if the credit has already been claimed by the taxpayer in an amount of $500 in any previous year.

Home businesses
If a structure serves as both a residence and place of business, spending may need to be allocated between residential and business use. If residential spending is at least 80%, then all spending qualifies for the residential credit. For commercial spending, there’s a 10% tax credit available, and 5-year MACRS accelerated depreciation.