

Geothermal water-to-water units and The Unico System

THE FOLLOWING IS GENERAL INFORMATION ABOUT GEOTHERMAL **WATER-TO-WATER** HEAT PUMPS AND THE UNICO SYSTEM WITH CHILLED OR HOT WATER COILS

The Unico System qualifies for the 30% Tax Credit when sold with *WATER-TO-WATER* Geothermal Systems.

The Federal Government provides a tax credit of thirty percent of the cost of installation for any qualifying water-to-water geothermal system. The system qualifies if the water-to-water geothermal equipment is listed as an EnergyStar qualifying unit. The tax credits are allowed when The Unico System chilled water coil air handlers are installed with the water-to-water geothermal system. The language in the tax code states that the allowable cost basis is the "installation costs". So as long as the cost of the air handlers, ducts, and piping are part of the geothermal system invoice to the homeowner, these costs can be included. You cannot receive the 30 percent credit for an air handler that is later purchased and installed.

Be sure to visit the geothermal manufacturer's website to confirm:

1. That their water-to-water geothermal heat pump is energy star rated
2. To confirm:
 - a. The cooling and heating capacities of each unit at their listed gpm
 - b. Entering fluid temperature (for heating) and leaving fluid temperature (for cooling) match with our coils

With all the variables that each Geothermal manufacturer has with their many different Geothermal water-to-water units, it is best to visit their website to understand and confirm any and all data concerning their specific Geothermal water-to-water heat pump capacities.

Remember, *ALL UNICO SYSTEMS ARE COMPATIBLE WITH A GEOTHERMAL WATER-TO-WATER HEAT PUMP.* The key is to understand what capacity requirements the conditioned space requires and use the appropriate number of Unico System/s.

* Please consult your tax advisor or the IRS to determine actual eligibility.



The "ENERGY STAR Program requirements for Geothermal Heat Pumps Eligibility Criteria Version 3.0" is based upon the rating of the Geothermal heat pump and the heat pump must meet the ratings as published in the document itself. A copy of the table is listed below.

Section 2 Qualifying Products: For purposes of ENERGY STAR qualification, geothermal heat pumps include the following: open loop and closed loop that are powered by single phase current. The specifications in Section 3 apply to single stage models. Multi-stage models may be qualified based on:

$$\text{EER} = (\text{highest rated capacity EER} + \text{lowest rated capacity EER}) / 2$$

and

$$\text{COP} = (\text{highest rated capacity COP} + \text{lowest rated capacity COP}) / 2.$$

Efficiency Requirements for Qualifying Products: Only those product types listed in Section 2 that meet the criteria below may qualify as ENERGY STAR.

Table 1: Tier 1 Requirements (December 1, 2009)			
Product Type		EER	COP
Water-to-Water			
Closed Loop Water-to-Water		15.1	3
Open Loop Water-to-Water		19.1	3.4
Table 2: Tier 2 Requirements (January 1, 2011)			
Product Type		EER	COP
Water-to-Water			
Closed Loop Water-to-Water		15.1	3
Open Loop Water-to-Water		19.1	3.4
Table 3: Tier 2 Requirements (January 1, 2012)			
Product Type		EER	COP
Water-to-Water			
Closed Loop Water-to-Water		16.1	3.1
Open Loop Water-to-Water		20.1	3.5