

Clarification on Tax Credits for Water-to-Water Units

The purpose of this news posting is to help clear up some of the confusion regarding water-to-water geothermal heat pumps and U.S. tax credits. Current legislation defines a qualified geothermal heat pump as one that meets Energy Star requirements at the time the heat pump is installed. Only qualified geothermal heat pumps are eligible for the tax credit.

Energy Star defines a qualifying product as one that meets the minimum efficiencies (14.1 EER / 3.3 COP for closed loop systems) under rating conditions in accordance with ISO 13256-1. ISO 13256-1 is a rating standard used by AHRI (Air Conditioning, Heating, and Refrigeration Institute) in the U.S. and by CSA (Canadian Standards Association) in Canada for rating and certifying performance of water-to-air heat pumps.

Water-to-water heat pumps are rated in accordance with ISO 13256-2. Even though many water-to-water heat pumps produced have efficiencies greater than the Energy Star requirements, they are rated using a different ISO standard, and therefore **do not qualify for the Energy Star label**. Since eligibility for the tax credit requires the Energy Star label, water-to-water units **are not eligible for the tax credit**.

With the above situation in mind, we recommend that contractors provide choices to consumers based upon the best fit for the application and the most financially beneficial for the customer. Since water-to-water units are very popular for radiant floor heating, contractors should continue to install water-to-water heat pumps, but also look at the cooling requirements, where a water-to-air unit could make the most sense. All Tranquility water-to-air geothermal heat pumps meet Energy Star requirements. In most cases a separate water-to-air unit for cooling (and supplemental heating if necessary) is more cost-effective than a fan coil/chilled water system for cooling. With the addition of the water-to-air unit, the installation includes an Energy Star product.

Floor warming is another application that works well. A smaller water-to-water heat pump can be sized to maintain a warm floor. In conjunction with the warm floor, a water-to-air unit provides the additional heating capacity needed to heat the home, as well as all of the cooling capacity. In the spring and fall, the system is much easier to control (for example when cooling is needed during the day and heating at night) than with the forced air system. When winter sets in, the floor warming system can be enabled, providing the ultimate in comfort.

Applications with water-to-water heat pumps are not eligible for the tax credit unless an Energy Star eligible water-to-air or split system geothermal heat pump is included. As we learn more about Energy Star and legislation that affects our customers, we will continue to keep you up to date. Thank you for your business.