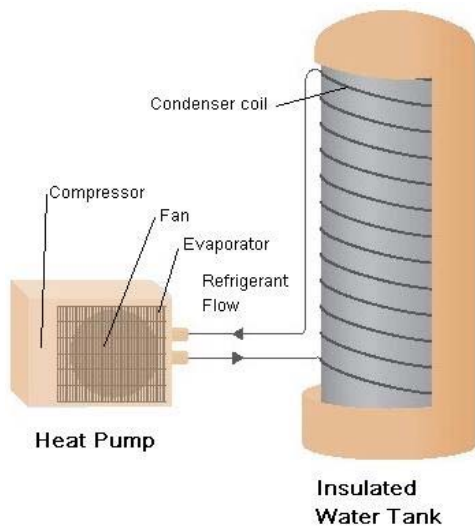


How can refrigerant heat water?

24 Hour Solar Hot Water without solar panels or booster!

A solar hot water system that does not require roof-mounted panels. It combines a heat pump with a Fin Coil evaporator. Similar to a domestic refrigerator, the system works on the principle of a refrigeration circuit, drawing heat out of one space and discharging it into another.



It basically consists of three major components, a compressor and two heat exchangers (an evaporator and a condenser)

In operation, the evaporator absorbs whatever heat energy is available to it from the atmosphere to vaporise the refrigerant. The vapour is then compressed raising its pressure and temperature. This high temperature vapour is passed through special pipes permanently bonded around the outside of the water storage tank, forming the condenser. As the refrigerant vapour condenses back to its liquid form, it gives off its heat to the stored water.

As this happens, the condensed refrigerant liquid passes back to the evaporator through an expansion device (TX Valve), is vaporised, and the cycle is then repeated

The refrigerant material is unusual in that it has a very low boiling (or vaporising) point well below 0°C at atmospheric pressure and a freezing point more than 100°C below zero. It is liquid when cold but easily becomes a vapour when heated and vice versa.

During operation, within the heat pump, the refrigerant can be vaporising at a temperature of around minus 20°C. Even an ambient air temperature of +5°C is **HOT** in comparison.

Thus, the "**21st Century**" water heater makes hot water very efficiently, can operate in all seasons of the year, under all conditions: shade, overcast, sun, rain, frost (*down to minus 5°C!*), and at *night (*It works most efficiently when the ambient air is the hottest - during the day*)

Other features & benefits:

- Sensational tank life from marine grade stainless steel
- Government Solar Rebate
- Is environmentally friendly
- Great choice for homes with limited power supply
- Very reliable & quiet in operation

For more information on HEAT PUMP water heaters, please call

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