



Operation:

When hot water is drawn from the existing electric hot water tank, it is replaced by solar pre-heated water from the pre-heat tank.

Colder well or city water replaces the solar pre-heated water drawn from the pre-heat tank.

When the pre-heat thermostat senses the preheat tank is below the set point (~105 deg F) the solar fan is activated.

The solar fan draws solar heated air from the solar tile air plenum.

Solar heated air is sent through the internal heat exchanger of the solar pre-heat tank, heating the water in the pre-heat tank.

The electric heating element in the electric tank, only operates to maintain water temperature in the electric tank at the setpoint temperature (~105 deg F).

The solar pre-heat tank can be bypassed and the electric tank will heat well or city water from the delivery temperature and maintain the electric tank temperature.

Exhaust air from the solar pre-heat tank can be used to heat outdoor heat pump air coils or returned to the solar heater, in winter, and exhausted to the atmosphere in summer.