

# FROM RENEWAIRE, THE ERV LEADER

For over 25 years RenewAire has been the innovator and leader in energy efficient residential ventilation. In RenewAire ERVs, stale room air is exhausted and fresh outdoor air is brought back into the house. These two air streams are directed through a highly developed “air-to-air” energy exchange core. The air streams are physically separated by many layers of “plates” so there is no mixing or contamination of the fresh air. The plates are made of an engineered “resin” material that simultaneously transfers heat by conduction and humidity by attracting and “wicking” water vapor from one air stream to the other.

RenewAire ERVs moderate extremes in both temperature and humidity. This not only contributes to an ideal indoor environment but also dramatically reduces the energy costs associated with providing healthy ventilation. The unique moisture transfer capability of the RenewAire core also eliminates condensation and frost build up in most applications. No mechanical or electrical defrost systems are needed, which means higher heat recovery efficiencies, easier installation and more reliable operation.



## During the Air Conditioning Season

When you need to cool for comfort do you hate the stuffy, musty air quality in your home? RenewAire ERVs provide necessary fresh air while pre-cooling and pre-dehumidifying this air with energy that would otherwise be lost with the exhaust air. With summertime humidity control (*latent energy*) being the largest portion of air conditioning cost, RenewAire’s humidity transfer is critical. In fact RenewAire is typically three times more energy efficient than products that transfer only heat.

## During the Heating Season

Outdoor air is warmed close to room temperature with heat that would otherwise be lost with the exhaust air. The water vapor transfer moderates extremes in humidity levels which helps prevent moisture damage or over-drying of the home. The heat and humidity transfer (*sensible and latent energy*) gives RenewAire a big advantage over other air-to-air exchangers typically recovering 30% more energy in winter.

***The key to RenewAire’s extraordinary performance is its static-plate exchange core. Within the core heat and humidity pass from one air stream to the other, but the air streams do not mix. Humidity exchange is in the gas phase so there is no need for a condensate pan or drain.***

