

ERV

Now Available with
Hard Wired Power!

EV SERIES PREMIUM

**SINGLE/MULTI-FAMILY,
LIGHT COMMERCIAL**

- ◆ 30–280 CFM
- ◆ Residential ERVs certified for commercial-grade applications
- ◆ EC motors, variable speed with boost-mode, Dial-A-Flow Easy Balancing, plug-in and hard wired power available
- ◆ MERV 13 filter accessory



EV Premium L



EV Premium M



NEW! EV Premium SH

 **RenewAire**[®]
Energy Recovery Ventilation

EV SERIES PREMIUM

SINGLE/MULTI-FAMILY, LIGHT COMMERCIAL ERV

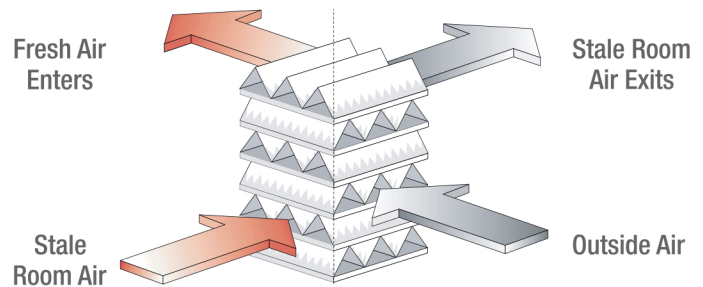
BALANCED VENTILATION & INDOOR AIR QUALITY

As new buildings get tighter to seal weather out, they seal in contaminants, causing deficient indoor air quality (IAQ). Since people spend, on average, 90% of their time indoors¹, and indoor air can be two to five times—and up to 100 times—more polluted than outdoor air², indoor air quality has very real impacts on health and cognitive function.

**AIRSTREAMS DO NOT MIX
& POLLUTANTS ARE NOT TRANSFERRED
ACROSS PARTITION PLATES**

HIGHEST-QUALITY INDOOR AIR

Our EV Series Premium ERVs can improve indoor air quality by removing contaminants, such as off-gassing from carpeting, furniture and building materials, excess humidity and mold. Our technology takes stale indoor air and replaces it with fresh, conditioned and filtered outdoor air.



ASHRAE 62.2

The American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) 62.2 committee has established a residential ventilation standard, known as *Ventilation and Acceptable Indoor Air Quality in Residential Buildings*. The goal of this standard and its continuous revisions are to not only evaluate and recommend every building's minimum ventilation needs, but also emphasize indoor air quality and its relationship with occupant health.

See the chart below to calculate the minimum ventilation required for your home: $.03 \times \text{sq. ft.} + 7.5(\text{bedroom} + 1)$. For example, a 2,200 sq. ft. home with 4 bedrooms requires a minimum of 104 CFM.

MINIMUM VENTILATION AIRFLOW REQUIRED BY HOME SIZE

SQUARE FEET	<500'	501'–1000'	1001'–1500'	1501'–2000'	2001'–2500'	2501'–3000'	3001'–3500'	3501'–4000'
1 BEDROOM	30	45	60	75	90	105	120	135
2 BEDROOMS	38	53	68	83	98	113	128	143
3 BEDROOMS	45	60	75	90	105	120	135	150
4 BEDROOMS	53	68	83	98	113	128	143	158
5 BEDROOMS	60	75	90	105	120	135	150	165

* Infiltration credit not considered, please contact RenewAire to assist in selecting a unit that is best suited for your home.

RENEWAIRE CORE TECHNOLOGY

CERTIFICATION

- ◆ Certified by the Home Ventilating Institute (HVI) against standard CAN/CSA-C439-18 for an industry-leading CFM/w and energy-transfer effectiveness for all RenewAire residential units (except BR series)
- ◆ Superior core flammability performance; passes UL-723 and UL-1812

MAINTENANCE

- ◆ RenewAire cores are easy to clean without removing them from the unit, and they never require washing

INNOVATIVE CONSTRUCTION

- ◆ Core exchanger material is cellulosic-based and doesn't contain or use halogenated flame retardants or PVCs
- ◆ Manufactured with a galvanized steel frame

RELIABILITY

- ◆ An industry-leading 10-year structural and performance warranty for the static-plate core and five-year warranty for residential products

EXCEPTIONAL PERFORMANCE

- ◆ Moderates heat and humidity via total energy recovery to maintain a comfortable indoor environment
- ◆ No need for frost protection or condensate pans
- ◆ Laminar airflow ensures that particulates do not accumulate in the core

REDUCED COSTS

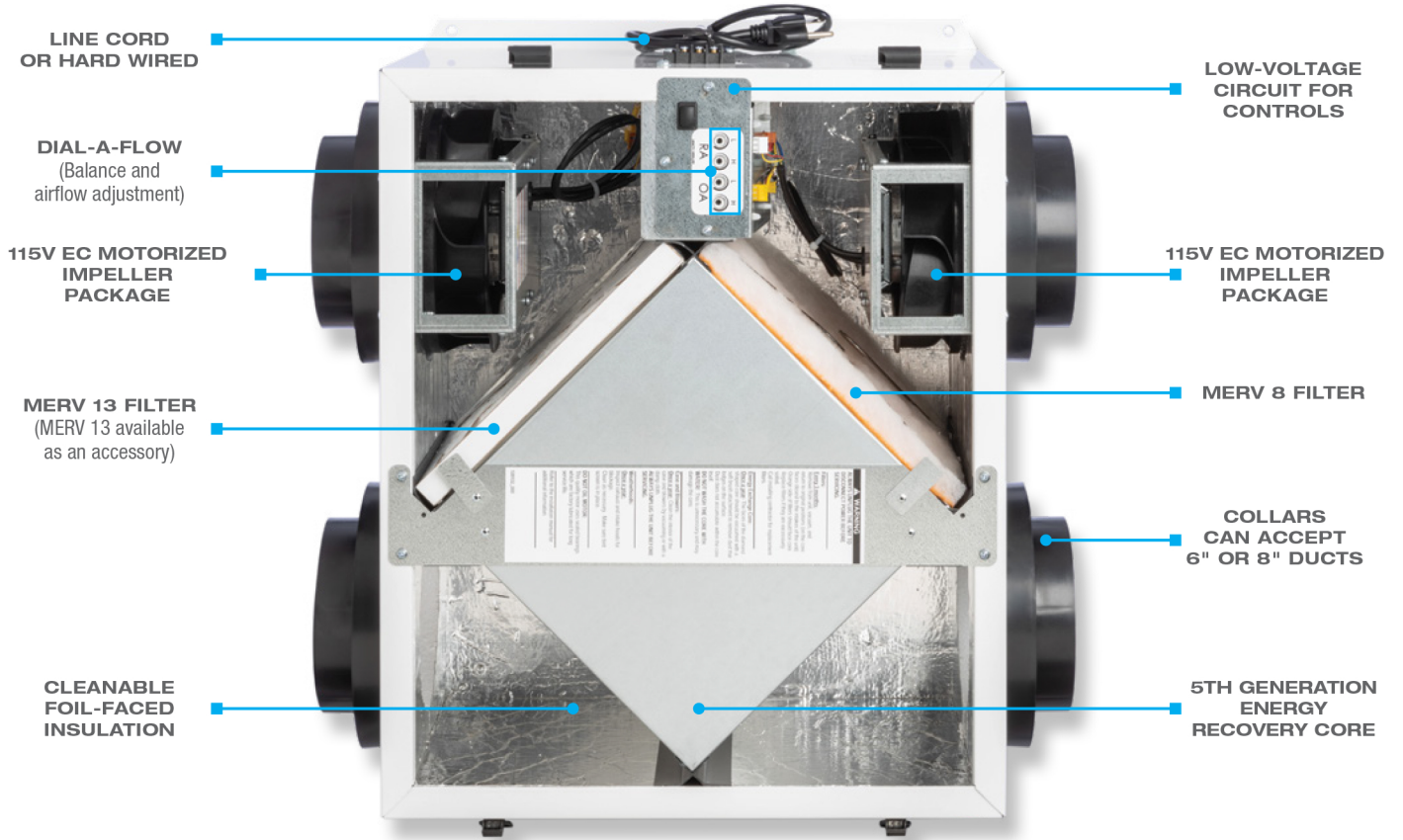
- ◆ Optimized energy efficiency via core energy transfer decreases ventilation energy requirements, which can result in smaller air conditioning and heating needs

¹ "Indoor Air Pollution: Introduction for Health Professionals," U.S. Consumer Product Safety Commission, <https://bit.ly/2Yk0czT>.

² "Why Indoor Air Quality is Important to Schools," U.S. Environmental Protection Agency (EPA), <https://bit.ly/2SoyRJc>.

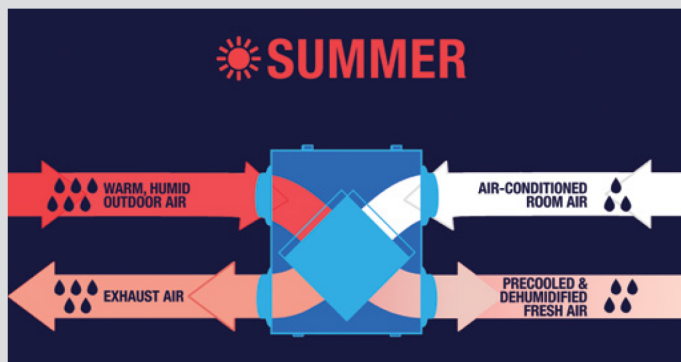
EV SERIES PREMIUM

Ideal for single- and multi-family structures, as well as light-commercial buildings, these EV Series Premium ERVs incorporate **high-efficiency EC-motor fans** to meet strict California energy codes. The EV Series Premium ERVs also include a **new Dial-A-Flow controller** that allows users to set airflow for maximizing comfort. In addition, these ERVs have boost-mode capabilities with **MERV 13 filters as an accessory** to further enhance IAQ.

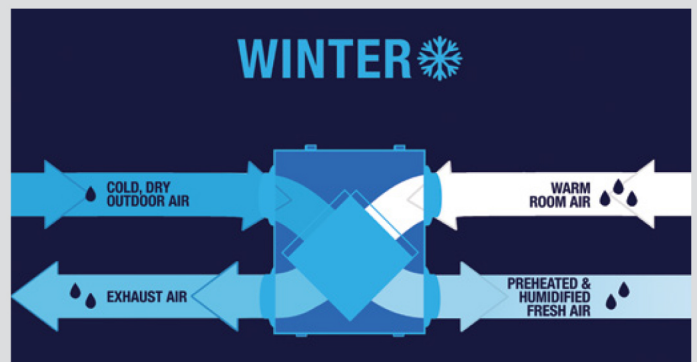


RENEWAIRE ERVs TEMPER THE AIR

Our ERVs moderate the extremes of outdoor supply-air temperature and humidity year-round, providing a sustainable ventilation solution for every climate.



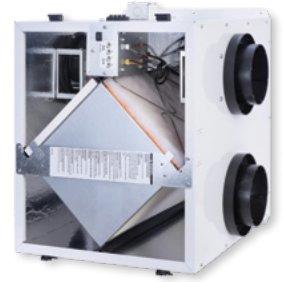
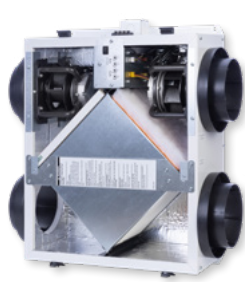
IN SUMMER, THE WARM, HUMID OUTSIDE AIR IS PRECOOLED AND DEHUMIDIFIED BY THE OUTGOING COOL INTERIOR AIR



IN WINTER, THE COLD, DRY OUTSIDE AIR IS PREHEATED AND HUMIDIFIED BY THE OUTGOING WARM INTERIOR AIR

APPLICATIONS



The EV Series Premium ERVs are indoor units for single-family, multi-family and light-commercial applications. With three units available, a wide airflow range and boost-mode, these ERVs are the perfect choice for a variety of applications.



EV PREMIUM S

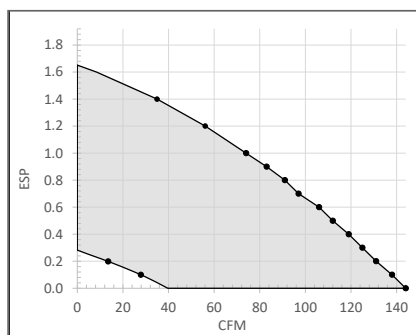
EV PREMIUM M

EV PREMIUM L

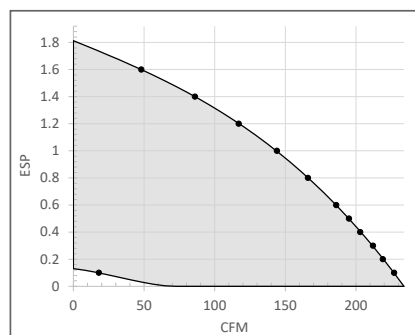
POWER SUPPLY	Line cord or hard wired		
AIRFLOW RANGE	30–130 CFM	30–225 CFM	30–280 CFM
INDEPENDENT VARIABLE SPEED WITH BOOST-MODE	Yes*		
LENGTH	22 1/2"		
WIDTH	9 1/2"	12 5/8"	23 5/8"
HEIGHT	23 3/4"		
WEIGHT	32 lbs.	36 lbs.	52 lbs.
MOUNT	Ceiling Bracket/Wall Bracket		
EC MOTOR	Yes		
FILTER	MERV 8, MERV 13 (supply outside air only for MERV 13)		
CORE WARRANTY	10-year		
UNIT WARRANTY	5-year		
FAN EFFICIENCY	1.82 CFM/watt at 51 CFM (0.2" ESP)	2.10 CFM/watt at 101 CFM (0.2" ESP)	2.7 CFM/Watt at 121 CFM (0.2" ESP)
CERTIFICATIONS	 		

*Boost-mode: Maximum airflow achievable in boost-mode when continuous airflow set point is below max rating.

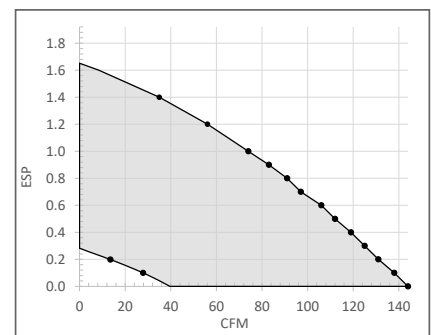
EV PREMIUM S



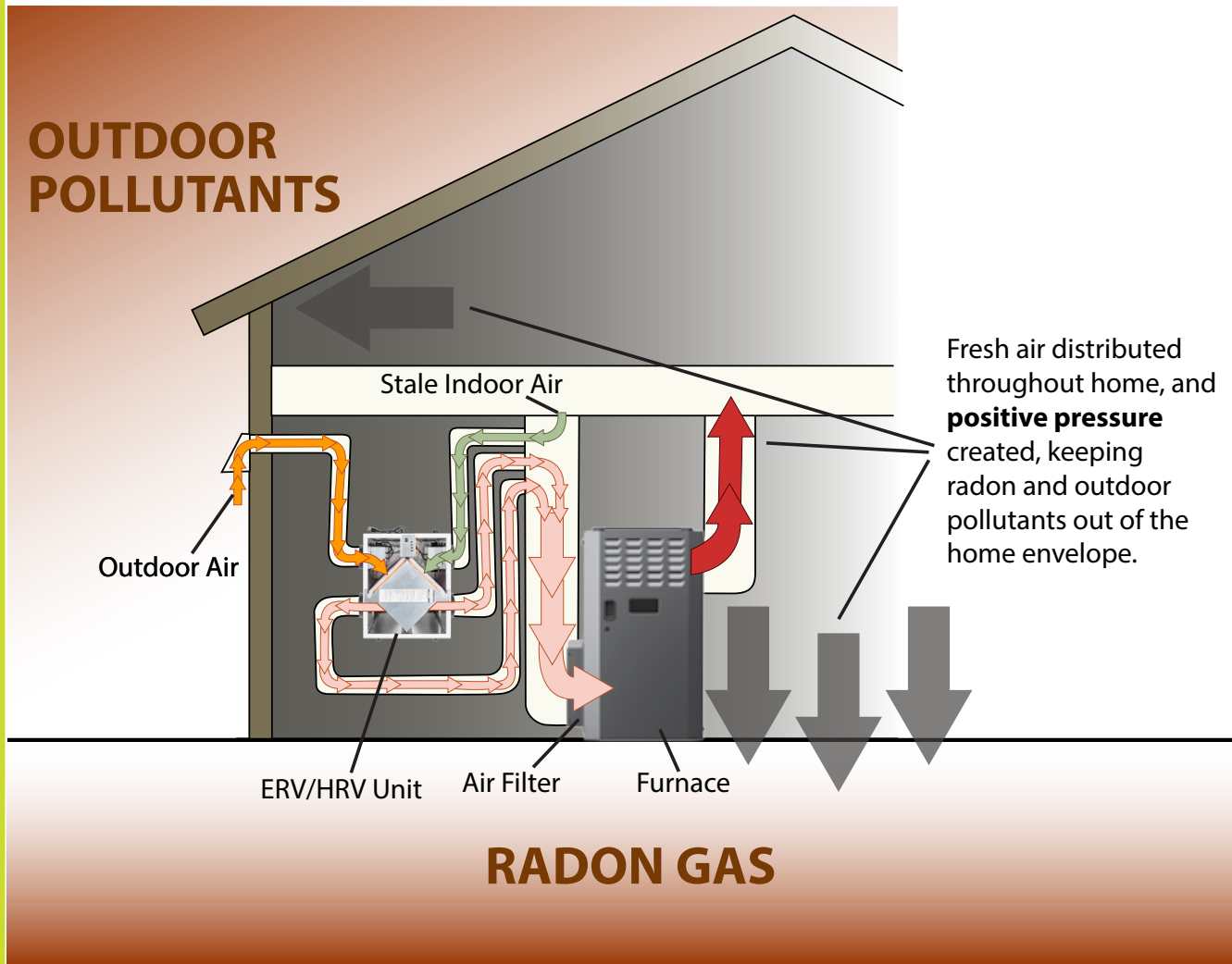
EV PREMIUM M



EV PREMIUM L



HOW RADON REDUCTION WORKS WITH A RENEWAIRE ERV



In a slightly different installation, the exhaust air is recirculated back into the home along with the fresh outdoor air. This creates positive pressure inside the home envelope, which keeps radon, wildfire smoke, smog, and other outdoor pollutants from seeping into the home. All air is filtered at both the ERV system, as well as at the furnace, providing further reduction in airborne particles.

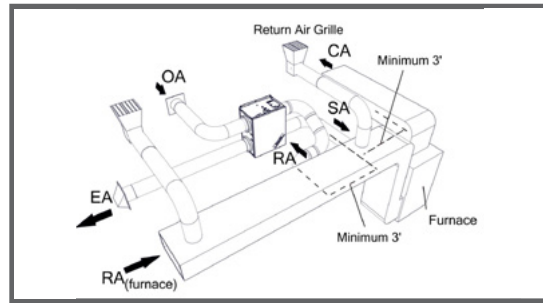
If you now have a boiler, hydronic, or in-floor radiant heating system, you may not have a duct system to which we can connect. We have done several systems for this application. We can install a "self-contained" ERV system and build a duct system to create the positive pressure necessary for radon level reduction.

INSTALLATION & MAINTENANCE

INSTALLATION

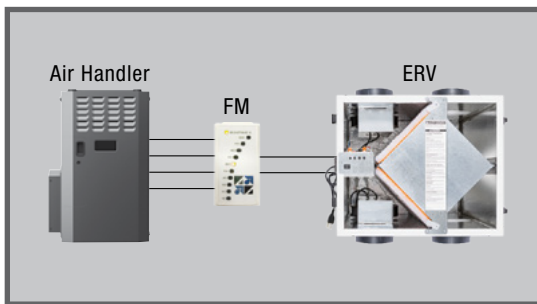
Installation of the EV Series Premium ERVs is simple and straightforward. Similar to the EV130, the EV Series Premium can be mounted in any orientation. Further, the RA/EA airstream can be switched with the OA/FA airstream.

The furnace blower must be operated any time the ERV is operated. Use furnace fan "on" continuous low speed or optional FM control to cycle furnace fan on ERV.

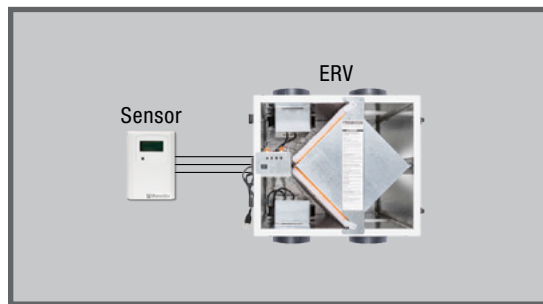


EV Series Premium Installation

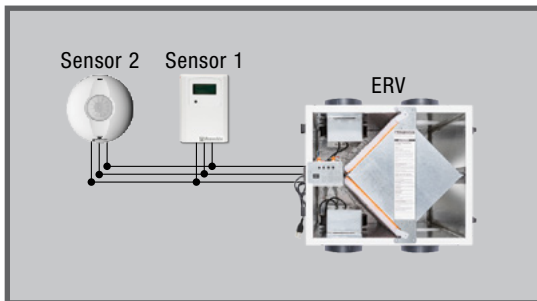
CONTROL STRATEGIES



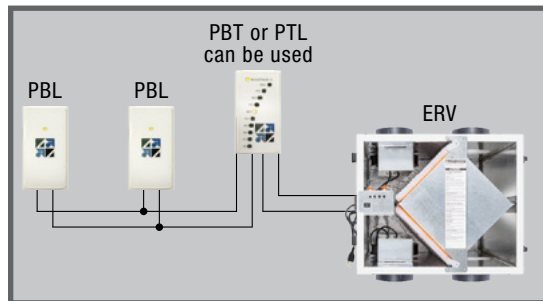
Interlock with Air Handler



Single Control



Multiple Controls



PBT or PTL with PBL

MAINTENANCE

Disposable filters should be checked and replaced as needed. Additionally, once a year, vacuum the four core faces using a soft brush. The RenewAire core does not need to be washed, as particulates do not accumulate in the core.

