

ERV

NOW AVAILABLE:
EV PREMIUM X

AWARD WINNING

EV PREMIUM SERIES

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

- ◆ 30–390 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 SH, MH, LH awarded TechHome Builder's 2023 Brilliance Award



 **RenewAire®**
Energy Recovery Ventilation

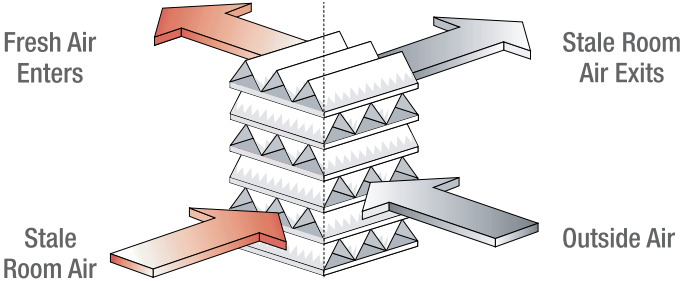
EV SERIES PREMIUM SINGLE/MULTI-FAMILY, LIGHT COMMERCIAL ERV

BALANCED VENTILATION & HIGHEST-QUALITY INDOOR AIR

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.

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.

AIRSTREAMS DO NOT MIX AND
POLLUTANTS ARE NOT TRANSFERRED
ACROSS PARTITION PLATES



BETTER HEALTH + LOWER BILLS = INCREASED VENTILATION VIA ERVs

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. **ERVs reduce energy costs while meeting the standard.**

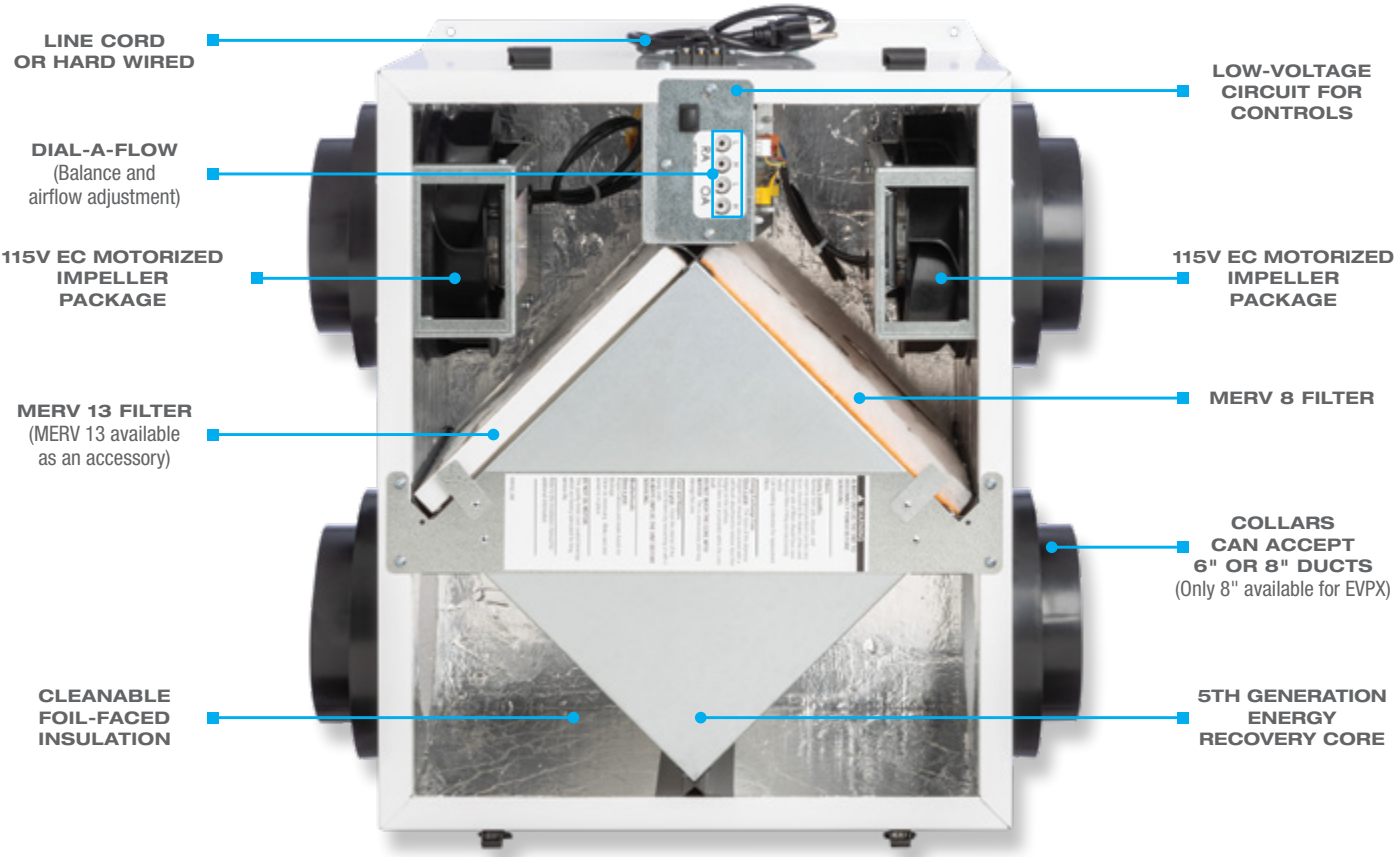
See the chart below to calculate minimum ventilation required for your home: .03 x sq. ft. + 7.5(bedroom +1). For example, a 2,200 sq. ft. home with 4 bedrooms requires a minimum of 104 CFM.

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.

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 CORE TECHNOLOGY

CERTIFICATION

- Commercial Units: Certified by the Air Conditioning, Heating and Refrigeration Institute (AHRI) for an industry-leading, low-to-zero Exhaust Air Transfer Ratio (EATR) at typical static pressure differential
- Residential Units: Certified by the Home Ventilating Institute (HVI) against standard CAN/CSA-C439-18 for an industry leading CFM/watt and energy transfer effectiveness (except BR 70)
- 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, two-year warranty for commercial products and five-year warranty for residential products

EXCEPTIONAL PERFORMANCE

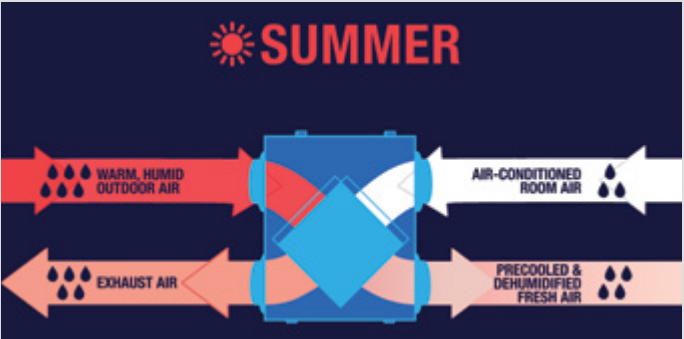
- Moderates heat and humidity via total energy recovery to maintain a comfortable indoor environment
- No need for frost protection or condensate pans
- Laminar airflow ensures that particulates do not accumulate in the core

REDUCED COSTS

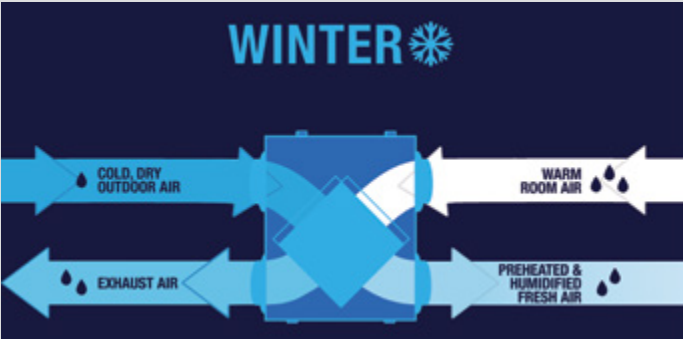
- Optimized energy efficiency via core energy transfer decreases ventilation energy requirements, which can result in smaller air conditioning and heating needs

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

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>.

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.



**VIEW OUR NEW
EV PREMIUM X**



EV PREMIUM S

EV PREMIUM M

EV PREMIUM L

EV PREMIUM X

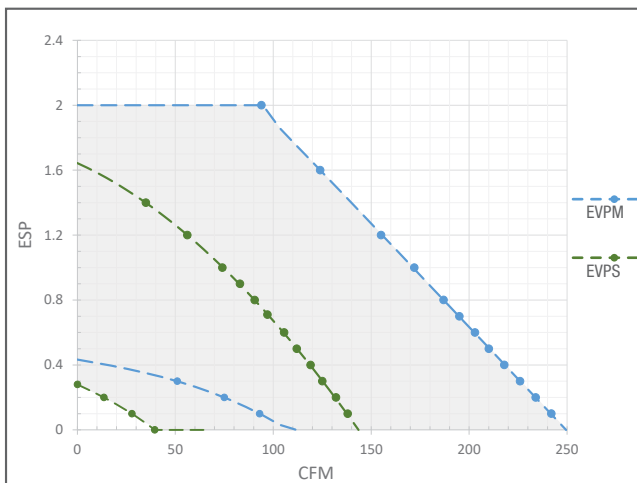
POWER SUPPLY	Line cord or hard wired			
AIRFLOW RANGE	30–130 CFM	30–225 CFM	30–280 CFM	100–390 CFM
INDEPENDENT VARIABLE SPEED WITH BOOST-MODE	Yes*			
LENGTH	22 1/2"	22 1/2"	22 1/2"	24 3/8"
WIDTH	9 1/2"	12 5/8"	23 5/8"	23 5/8"
HEIGHT	23 3/4"	23 3/4"	23 3/4"	27 1/4"
WEIGHT	32 lbs.	36 lbs.	52 lbs.	65 lbs.
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)	2.44 CFM/watt at 197 CFM (0.2" ESP)
EXAMPLE RATINGS**	74% SRE at 51 CFM***	81% SRE at 51 CFM***	88% SRE at 59 CFM***	78% SRE at 102 CFM***
CERTIFICATIONS	 			

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

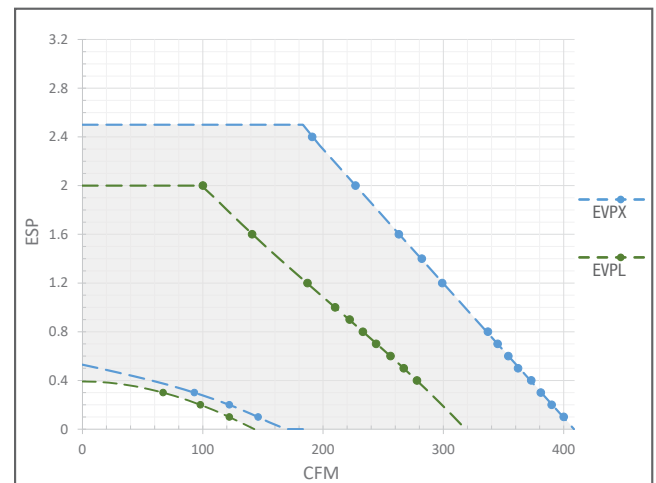
**For all rating points, please refer to the HVI website certified products directory.

***HVI rating point at 32°F.

EV PREMIUM S/M



EV PREMIUM L/X



ACCESSORIES

FILTERS



MERV 13 Filters OA Airstream

MOUNTS



Wall-Bracket Kit

LOUVERS & WALL VENTS



6", 8" White or Brown



Concentric Vent

CONTROLS



Percentage Timer (PTL)



Percentage Timer with
Furnace Interlock (FM)



Push-Button,
Point-of-Use Timer (PBL)



Push-Button,
Boost Timer (PBT)



CO2 Sensor
Duct Mount



IAQ Sensor
Duct Mount



CO2 Sensor
Wall Mount



IAQ Sensor
Wall Mount



Occupancy Sensor
Wall Mount



Occupancy Sensor
Ceiling Mount



Digital Time
Clock Wall Mount



Digital Time Clock
Exterior Enclosure

DAMPERS



Automatic Balancing Valve
4", 5", 6"



Backdraft Damper



Motorized Damper
6", 8"

HEATERS



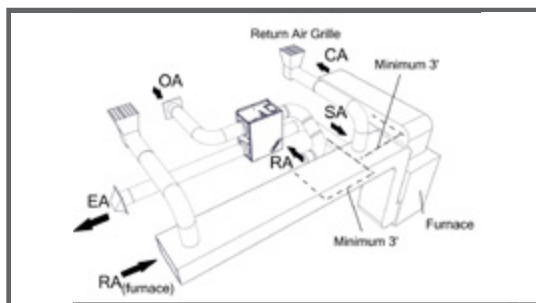
RH Series Electric Duct Heater
1kW, to 11.5kW

INSTALLATION & MAINTENANCE

INSTALLATION

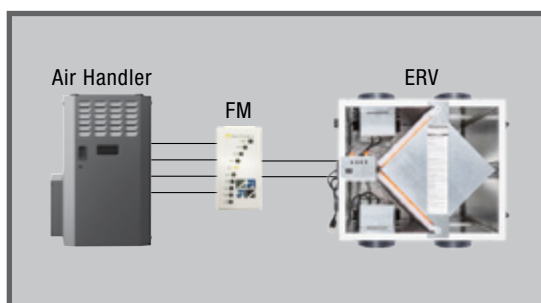
Installation of the EV Series Premium ERVs is simple and straightforward. Similar to the EV130, the EV Series Premium can be mounted in any orientation. Further, the RA/EA airstream can be switched with the OA/FA airstream.

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.

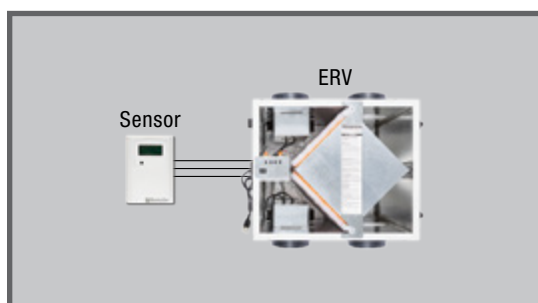


EV Series Premium Installation

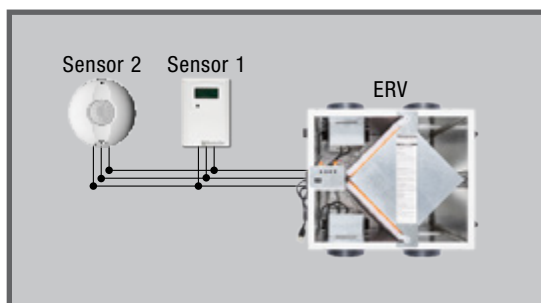
CONTROL STRATEGIES



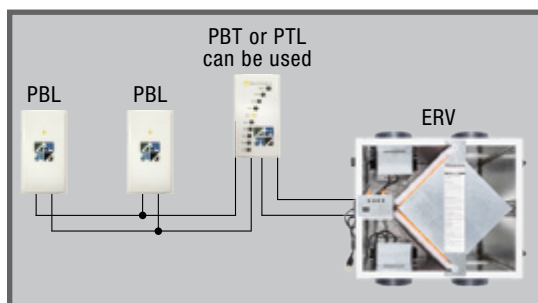
Interlock with Air Handler



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.

