

90 Series

Energy Recovery Ventilators

EV90 - Superior performance and features at a competitive price

GR90 - Same superior performance in a galvanized finish/line voltage package

EV90P - Double the core, no compromise performance perfect for Passive House and LEED projects



- Higher heat recovery than virtually all HRVs
- Top performance of all plate ERVs for air conditioning savings
- Motorized impeller for low electric consumption, quiet operation and long life
- No condensate pan or drain
- mounts in any position
- Less than 1 watt standby power consumption
- MERV-8 Filters exceeding ASHRAE 62.2 requirements
- The only residential HRV/ERV made in the US (HVI Certified)
- Meets full commercial code requirements



Advanced ventilation for residential and small commercial application. Superior electrical and heat transfer performance at an affordable price. Passive plate type Energy Recovery Ventilator (ERV) moderates extremes of temperature and humidity year round. Compact size, no condensate pan or drain and the ability to mount the unit in any orientation means that the 90-Series is the easiest unit to install and service.

FEATURES

- Motorized impeller blowers result in superior air handling efficiency - 4.0 CFM/watt (90 CFM for each airstream divided by 45 Watts total power consumption.) This exceeds Energy Star standards for exhaust fans by 40%
- Heat recovery efficiency at 90 CFM is higher than most competitors' high performance models which cost hundreds of dollars more.
- Less than 1 watt standby power consumption.
- MERV-8 filter standard, exceeding ASHRAE 62.2 filtration requirements.
- ERV core means more heat recovery and better humidity control in climates both hot and cold, dry or humid.
- Probably the lowest supply air noise level of all HRV/ERV models in North America.

ACCESSORIES

- **Weatherhoods** - **VW106**, white vinyl, multi louver design; **VB106**, brown vinyl, multi louver design; **BD6**, 6 inch backdraft dampers for horizontal application in either OA or EA positions.

CONTROLS

The EV90 and EV90P have a line cord and an onboard low voltage control package allowing any switch that closes across the two control terminals to turn the unit on. RenewAire offers the following optional controls for the EV90/EV90P.

- **PTL** - Proportional Runtime control with indicator lights. Runs unit an adjustable amount of time each hour.
- **PBL** - Push Button control with indicator light. Up to six may be connected to a PTL for automatic control/manual control from bathrooms.
- **FM** - A proportional runtime control that will also turn on a furnace blower to distribute fresh air.

The GR90 can be operated with any switched line voltage power supply and is intended to be hard wired (no line cord provided.)

WARRANTY

The RenewAire 90-Series ERVs are protected by a 10 year warranty on the ERV core and a 5 year warranty on all other parts. See RenewAire's web site for warranty details.

HVI Certified Performance		
Energy Performance at 90CFM	EV90/GR90	EV90P
Apparent Sensible Effectiveness (Heating)	79%	86%
Sensible Recovery Efficiency (Heating)	72%	80%
Latent Recovery/Moisture Transfer (Heating)	37%	64%
Total Recovery Efficiency (Cooling)	46%	63%
Ventilation Performance	Net Supply Air Flow	
ESP.	CFM	CFM
0.1	113	108
0.2	98	99
0.3	85	87
0.4	73	73
0.5	58	56
0.6	40	42
Exhaust Air Transfer @ 0.2 inch	2%	2%
Exhaust Air Transfer @ 0.4 inch	2%	2%
VAC @ 60 Hz	120	120
Amp Rating	0.35	0.35
Watts Heating	46	44
Watts Cooling	44	44

SPECIFICATIONS

Core - RenewAire's core is our 5th generation cross flow ERV core that efficiently transfers both heat and water vapor while isolating the transfer of indoor pollutants.

- More heat transfer than most HRVs
- Moderates extremes of humidity year round
- No condensate formation
- No frost formation in all but the most severe climates
- Core does not act as a filter, for long service life

Blower/Motor Packages - Two motorized impeller blowers with steel backward inclined blades. Motors are permanently lubricated, sealed bearings for maintenance-free operation and long life. These premium packages are among the most energy efficient and quietest available.

Cabinet - Case constructed of 22 gauge steel with lapped corners and zinc plated screw fasteners. Both inlets have an aerodynamic, drawn metal ring formed into the cabinet. There are two integral mounting flanges. Doors are mounted to the cabinet with demountable hinges and cam latches and are fully insulated with 1 inch, expanded polystyrene foam insulation faced with a cleanable foil face on all exposed surfaces. The EV90 cabinet and door is finished with textured, powder coat paint. The GR90 cabinet and door are constructed of G90 galvanized metal for superior corrosion protection.

Filters - Each airstream is filtered by MERV-8, spun polyester, disposable filters.

Duct Connections - Plastic double collar duct connections are provided for each airstream. The inner collar accepts 6 inch duct. The outer collar may be used to secure the outer jacket of insulated duct measuring a nominal 8 inches diameter.