





#### **DECEMBER 2021**

RENEWAIRE.COM | 800.627.4499

## BECAUSE INDOOR

## **AIR QUALITY MATTERS**

As buildings become more airtight due to better construction methodologies, the need for increased and balanced ventilation is critical. Without it, internally generated contaminants accumulate and cause **deficient indoor air quality** (IAQ), which leads to significant health and cognitive problems for occupants. Industry standards are changing to combat deficient IAQ, and codes that adopt these new standards are driving the

application of Energy Recovery in ventilation strategies.

Deficient IAQ is a serious problem, especially considering:

- On average, Americans spend 90% of their time indoors
- ◆ The EPA found that indoor air may be 2-5 times—and occasionally greater than 100 times—more polluted than outdoor air
- The EPA ranks indoor air pollutants as a top-five environmental health risk to occupants







## ADVERSE EFFECTS OF **DEFICIENT IAQ**

Deficient IAQ has numerous adverse effects on the health and cognitive function of building occupants.



**Health problems:** Acute allergies, headaches, coughs, asthma, skin irritations and breathing difficulties, as well as chronic illnesses such as cancer, liver disease, kidney damage and nervous-system failure.



**Cognitive impairment:** Studies by the Harvard School of Public Health and the Lawrence Berkeley National Laboratory found that carbon dioxide (CO<sub>2</sub>)—an indoor air contaminant—negatively impacted thinking and decision-making at levels commonly found inside homes and buildings.

#### **ABOUT RENEWAIRE**

For over 30 years, **RenewAire has been a pioneer** in enhancing IAQ in commercial and residential buildings of every size. This is achieved while maximizing sustainability through our fifthgeneration, enthalpic-core, static-plate Energy Recovery Ventilators (ERVs) & Dedicated Outdoor Air Systems (DOAS) that optimize energy efficiency, lower capital costs and decrease **operational expenses** by reducing HVAC loads therefore minimizing equipment needs, resulting in significant energy savings. Our ERVs/DOAS are competitively priced, simple to install, easy to use and maintain, have a quick payback and enjoy the industry's best warranty with the lowest claims due to long-term reliability. In 2010, RenewAire joined the Soler & Palau (S&P) Ventilation Group, providing direct access to the latest in energyefficient air-moving technologies. For more information, visit: renewaire.com.

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<sup>\*</sup>Continuous mode range

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## RENEWAIRE ERVs

## **ACHIEVE SUSTAINABLE IAQ**

RenewAire is a **pioneer in enhancing IAQ** while maximizing sustainability through enthalpic-core, static-plate Energy Recovery Ventilators (ERVs) that **optimize energy efficiency, lower costs by reducing HVAC loads and therefore reduce environmental footprints**. Our ERV technology preconditions incoming air with the otherwise-wasted energy (heat and humidity) of the exhaust air going out—all while the airstreams are kept physically separate as certified by the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) for low-to-zero Exhaust Air Transfer Ratio (EATR) at typical static pressure differentials. As the pioneer of static-plate core technology in North America, RenewAire is the largest ERV producer in the USA.

#### OPTIMIZING ENERGY EFFICIENCY

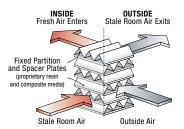
Energy efficiency is optimized by preconditioning the outside air coming in with the **otherwise-wasted heat and humidity** of the exhaust air going out. This exchange of energy moderates temperatures and moisture, decreases HVAC equipment needs, drives operational efficiencies and conserves energy.





#### REDUCING HVAC LOADS

RenewAire technology reduces **HVAC loads** during both winter and summer. In turn, HVAC equipment capacities can be decreased, thus furnaces and air conditioners can be smaller. This process ensures efficient operations and keeps both energy use and costs low, while maintaining high-level IAQ.



#### MINIMIZING ENVIRONMENTAL IMPACT

The combination of less energy used and HVAC loads being reduced conserves resources. Further, our Madison, WI plant is 100% powered by renewable wind energy, and is one of the few buildings worldwide to be LEED® Gold and Green Globes certified, as well as having achieved ENERGY STAR Building status. This commitment to sustainable manufacturing minimizes our overall production and distribution environmental footprint.



# WHY RENEWAIRE IS PREFERED



#### **BEST VALUE**

- Priced competitively against other energy recovery ventilation technology
- Due to competitive pricing and decreased costs, payback is short and ROI is maximized
- · Contractors and OEMs can pass these significant savings along to their customers
- End users can benefit from a significantly reduced operating cost



#### RELIABLE OPERATION

- Built-to-last ERVs have lifespans of 25+ years and operate consistently year-round in every extreme, including frost-free performance in all but the most severe winter climates
- High-efficiency core operates dry in all conditions, meaning no condensate pans
- An industry-leading ten-year warranty for the static-plate core, two-year warranty for commercial products and a five-year warranty for residential products
- Superior product quality results in paramount reliability and longevity



#### HIGHEST-QUALITY INDOOR AIR

- Stale indoor air is replaced with fresh, conditioned and filtered air from the outside, resulting in Enhanced IAQ by removing harmful contaminants
- Airstreams do not mix and pollutants are not transferred across partition plates
- No biocide used; material does not promote biological growth
- Moderated temperatures and humidity maintain a comfortable indoor environment



#### OPTIMIZED ENERGY EFFICIENCY

- Efficient heat and humidity transfer recaptures up to 70–80% of the energy exhausted in the airstream
- Energy that's otherwise wasted by conventional ventilation systems (such as bath fans) is reused, thus dramatically reducing monthly operation costs
- Energy-efficient operation decreases HVAC loads, which cuts down on energy use and costs
- The hotter or colder the climate, the more energy is recovered



#### HIGHLY CERTIFIED

- RenewAire products are highly certified. See individual catalog submittal for certification details:
  - UL cUL ETL HVI AHRI





#### Energy Recovery Ventilator

**EC Motor** 





#### **SPECIFICATIONS**

#### **Ventilation Type:**

Static plate, heat and humidity transfer

Continuous Operation Airflow: 51–76 CFM Boost Mode Airflow: 76–94 CFM

Unit is HVI Tested/Certified per CSA C439 Protocol: Using one L-30-G5 Core

#### Standard Features:

Gray painted cabinet
Hard wiring in junction box
Low-voltage circuit for controls
Unit may be mounted in any orientation
Cross-core differential pressure ports
Dial-A-Flow: balance and airflow adjustment
Variable speed
Boost-mode

#### Controls:

Onboard digital controller with independent variable speeds

#### Filters:

Total qty. 2, MERV 8, spun-polyester media: 7 1/2" x 10 1/2" x 1"

Unit Weight: 32 lbs.

Max. Shipping Dimensions & Weight (in carton): 29 1/2" L x 22 1/2" W x 11 1/2" H

## 38 lbs.

Motor(s): Qty. 2, 48V EC motorized impellers

#### Accessories:

Backdraft damper: 6", 8" Automatic balancing damper: 4", 5", 6" Louvered wall vent 6": white, brown Digital time clock: wall mount (TC7D-W), in extensive conser/control: wall mount

Carbon dioxide sensor/control: wall mount (CO2-W) IAQ sensor: wall mount (IAQ-W)

Motion occupancy sensor/control: ceiling mount (MC-C), wall mount (MC-W)

Push-button boost timer (PBT) Percentage timer control (PTL)

Percentage timer control with furnace interlock (FM) Push-button point-of-use controls (PBL), PTL req'd. MERV 13 filter: OA airstream (shipped loose)

Wall bracket kit

Electric duct heater: RH series (1–3 kW); designed for indoor ductwork installation only

#### EC MOTOR OPERATING RANGE

Sample Points Depicted in Larger Dots							
	Airflow (CFM)	External Static Pressure (Inches Water Column)	Unit Power Consumption (Watts)				
	82	0.1	62				
	77	0.2	60				
Continuous Mode	72	0.3	59				
NS N	67	0.4	58				
in	61	0.5	56				
Com	54	0.6	54				
	45	0.7	51				
	34	0.8	47				
	108	0.1	104				
	102	0.2	102				
	95	0.3	100				
<u>e</u>	91	0.4	99				
Boost-Mode	89	0.5	97				
oost	85	0.6	96				
ă	81	0.7	94				
	76	0.8	92				
	70	0.9	89				
	61	1.0	85				

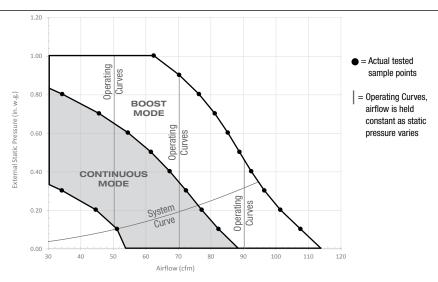
Note: Watts is for the entire unit.

**Note:** Airflow performance includes effect of clean, standard filter supplied with unit.

Note: Refer to CORES for specific operating point electrical data.

#### ELECTRICAL DATA

Watts	Volts	Hz	Phase	FLA per motor	Min. Cir. Amps	Max. Overcurrent Protection Device
96	120	60	1	2	10	15



#### **CORE PERFORMANCE**

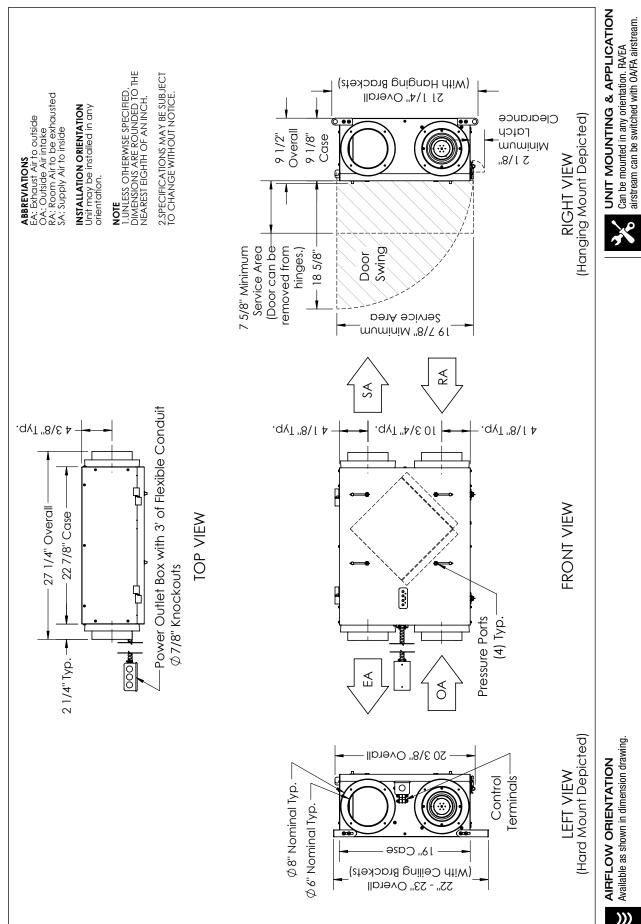
	Cantinuous Made			Donat Made	
	Continuous Mode			Boost-Mode	
Airflow (CFM)	Sensible EFF%	Total EFF% Winter/Summer*	Airflow (CFM)	Sensible EFF%	Total EFF% Winter/Summer*
82	73	67/52	108	68	61/44
77	74	68/53	102	69	62/46
72	75	69/55	95	71	64/48
67	76	70/56	91	71	65/49
61	77	72/58	89	72	65/50
54	78	73/60	85	72	66/51
45	80	75/62	81	73	67/52
34	82	78/65	76	74	68/53
			70	75	70/55
			61	77	72/58

Note: These are core-only ratings and are not HVI certified.

HVI ratings apply to complete units only.

See HVI certification ratings on pg. 32 of Single/Multi-Family Catalog.













#### **Energy Recovery Ventilator**

**EC Motor** 





#### **SPECIFICATIONS**

**Ventilation Type:** 

Static plate, heat and humidity transfer

Continuous Operation Airflow: 51–76 CFM Boost Mode Airflow: 76–94 CFM

Unit is HVI Tested/Certified per CSA C439 Protocol: Using one L-30-G5 Core

**Standard Features:** 

Gray painted cabinet Line-cord power supply Low-voltage circuit for controls Unit may be mounted in any orientation Cross-core differential pressure ports Dial-A-Flow: balance and airflow adjustment Variable speed Boost-mode

**Controls:** 

Onboard digital controller with independent variable speeds

Total qty. 2, MERV 8, spun-polyester media: 7 1/2" x 10 1/2" x 1"

Unit Weight: 32 lbs.

Max. Shipping Dimensions & Weight (in carton): 29 1/2" L x 22 1/2" W x 11 1/2" H

38 lbs.

Motor(s): Qty. 2, 48V EC motorized impellers

Accessories:

Backdraft damper: 6". 8" Automatic balancing damper: 4", 5", 6"
Louvered wall vent 6": white, brown Digital time clock: wall mount (TC7D-W),

Digital time clock: wall mount (TC7D-W), in exterior enclosure (TC7D-E) Carbon dioxide sensor/control: wall mount (CO2-W) IAQ sensor: wall mount (IAQ-W) Motion occupancy sensor/control: ceiling mount (MC-C), wall mount (MC-W) Push-button boost timer (PBT) Percentage timer control (PTL) Percentage timer control with furnace interlock (FM)

Percentage timer control with furnace interlock (FM) Push-button point-of-use controls (PBL), PTL req'd. MERV 13 filter: OA airstream (shipped loose)

Wall bracket kit

Electric duct heater: RH series (1-3 kW); designed for indoor ductwork installation only

#### **EC MOTOR OPERATING RANGE**

	Sample Points Depicted in Larger Dots					
	Airflow (CFM)	External Static Pressure (Inches Water Column)	Unit Power Consumption (Watts)			
	82	0.1	62			
	77	0.2	60			
<b>Continuous Mode</b>	72	0.3	59			
NS N	67	0.4	58			
ing	61	0.5	56			
뎡	54	0.6	54			
	45	0.7	51			
	34	0.8	47			
	108	0.1	104			
	102	0.2	102			
	95	0.3	100			
e	91	0.4	99			
Boost-Mode	89	0.5	97			
ost	85	0.6	96			
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	70	0.9	89			
	61	1.0	85			

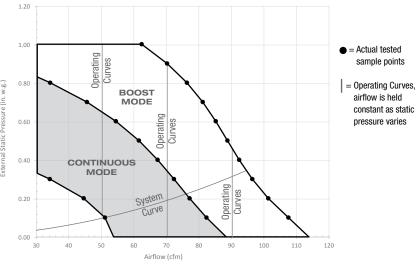
Note: Watts is for the entire unit.

**ELECTRICAL DATA** 

Note: Airflow performance includes effect of clean, standard filter supplied with unit.

Note: Refer to CORES for specific operating point electrical data.

## 0.40 0.20



#### **CORE PERFORMANCE**

	Continuous Mode		Boost-Mode			
Airflow (CFM)	Sensible EFF%	Total EFF% Winter/Summer*	Airflow (CFM)	Sensible EFF%	Total EFF% Winter/Summer*	
82	73	67/52	108	68	61/44	
77	74	68/53	102	69	62/46	
72	75	69/55	95	71	64/48	
67	76	70/56	91	71	65/49	
61	77	72/58	89	72	65/50	
54	78	73/60	85	72	66/51	
45	80	75/62	81	73	67/52	
34	82	78/65	76	74	68/53	
			70	75	70/55	
			61	77	72/58	

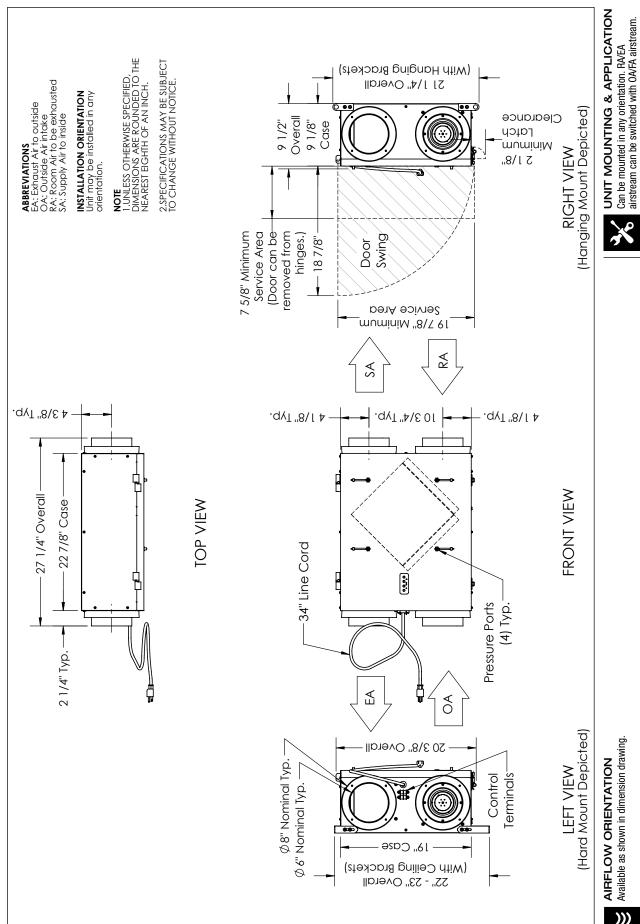
Watts	Volts	Hz	Phase	FLA per motor	Min. Cir. Amps	Max. Overcurrent Protection Device
96	120	60	1	2	10	15

Note: These are core-only ratings and are not HVI certified.

HVI ratings apply to complete units only.

See HVI certification ratings on pg. 32 of Single/Multi-Family Catalog.











Duct Mounted or Thru-the-Wall



#### **Energy Recovery Ventilator**



#### **SPECIFICATIONS**

#### Ventilation Type:

Static plate, heat and humidity transfer

Typical Airflow Range: 40-70 CFM

Unit is Tested to CSA C439 Protocol:

Using one L-30-G5 Core

#### **Standard Features:**

White painted cabinet Line-cord power supply Built-in control

Unit may be mounted in any orientation Cross-core differential pressure ports

#### **Control:**

Built-in proportional runtime control and switched terminals for furnace/AC interconnect

#### Filters:

Total qty. 2, MERV 8, spun-polyester media: 7 1/2" x 10 1/2" x 1"

Unit Weight: 38 lbs.

Max. Shipping Dimensions & Weight (in carton):

30" L x 22" W x 15" H 50 lbs.

Motor(s): Qty. 1, Double-shaft standard motor

#### Accessories:

Backdraft damper: 6", 8" Automatic balancing damper: 4", 5", 6" Louvered wall vent 6": white, brown Exterior thru-the-wall installation kit Duct collar kit (two collars) MERV 13 filter: OA airstream (shipped loose)

Electric duct heater: RH series (1-3 kW); designed for indoor ductwork installation only

#### **ELECTRICAL DATA**

HP	Volts	Hz	Phase	Input Watts	FLA
0.08	120	60	Single	94 @ 69 CFM	1.0

#### **UNIT PERFORMANCE**

Airflow CFM	ESP in H <sub>2</sub> 0
46	0.40
59	0.30
73	0.20
86	0.10

#### **CORE PERFORMANCE**

Airflow CFM	Temp EFF%	Total EFF% Winter/Summer*
46	80	75/62
59	77	72/58
73	75	69/54
86	72	66/51

Note: These are core-only ratings and are not HVI certified. See performance ratings per CSA C439 on pg. 33 of Single/Multi-Family Catalog.

#### **UNIT DIMENSIONS**



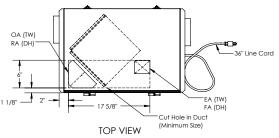
#### **AIRFLOW ORIENTATION**

Available as shown in dimension drawing.



#### **UNIT MOUNTING & APPLICATION**

Can be mounted in any orientation. If duct-mounted, airstreams cannot be switched. If mounted with exterior Thru-the-wall installation kit, the RA/EA airstreams are switched with the OA/FA airstreams. If four ducts are connected using duct collar kit, airstreams may be switched.



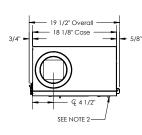
ABBREVIATIONS
EA: Exhaust Air to outside
OA: Outside Air intake
RA: Room Air to be exhausted
FA: Fresh Air to inside
TW: Thru Wall
DH: Duct Hung

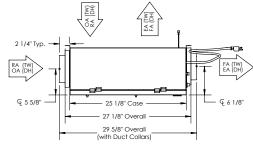
**INSTALLATION ORIENTATION**Unit may be installed in any orientation.

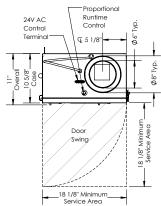
NOTE
1.UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE ROUNDED TO THE
NEAREST EIGHTH OF AN INCH.

2. PRESSURE PORTS FOR EACH AIR STREAM ARE LOCATED ON DOOR OF UNIT.

SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.







LEFT VIEW FRONT VIEW

**RIGHT VIEW** 





Duct Mounted or Thru-the-Wall



#### **Energy Recovery Ventilator**





#### **SPECIFICATIONS**

#### Ventilation Type:

Static plate, heat and humidity transfer

Typical Airflow Range: 50-140 CFM

Unit is HVI Tested/Certified per CSA C439

Protocol: Using one L-50-G5 Core

#### **Standard Features:**

White painted cabinet Line-cord power supply

Built-in control

Unit may be mounted in any orientation Cross-core differential pressure ports

Built-in proportional runtime control and switched terminals for furnace/AC interconnect

#### Filters:

Total qty. 2, MERV 8, spun-polyester media: 10 1/2" x 10 1/2" x 1"

#### Unit Weight: 48 lbs.

Max. Shipping Dimensions & Weight (in carton): 32" L x 22" W x 18" H

60 lbs.

#### Motor(s):

Qty. 1, Double-shaft standard motor

#### **Accessories:**

Backdraft damper: 6", 8"

Automatic balancing damper: 4", 5", 6"
Louvered wall vent 6": white, brown Exterior thru-the-wall installation kit

Duct collar kit (two collars)

MERV 13 filter: OA airstream (shipped loose) Electric duct heater: RH series (1-5 kW);

designed for indoor ductwork installation only

#### **ELECTRICAL DATA**

HP	Volts	Hz	Phase	Input Watts	FLA
0.1	120	60	Single	121 @ 124 CFM	1.3

#### **UNIT PERFORMANCE**

Airflow CFM	ESP in H <sub>2</sub> 0
51	0.70
68	0.60
93	0.50
112	0.40
131	0.30
140	0.20
148	0.10

#### **CORE PERFORMANCE**

Airflow CFM	Temp EFF%	Total EFF% Winter/Summer*	
51	82	78/65	
68	80	75/61	
93	76	71/56	
112	74	68/53	
131	71	65/49	
140	70	63/47	
148	69	62/46	

Note: These are core-only ratings and are not HVI certified.

HVI ratings apply to complete units only.

See HVI certification ratings on pg. 32 of Single/Multi-Family Catalog.

#### **UNIT DIMENSIONS**



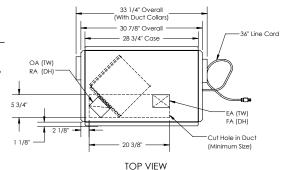
#### AIRFLOW ORIENTATION

Available as shown in dimension drawing.



#### **UNIT MOUNTING & APPLICATION**

Can be mounted in any orientation. If duct-mounted, airstreams cannot be switched. If mounted with exterior Thru-the-wall installation kit, the RA/EA airstreams are switched with the OA/FA airstreams. If four ducts are connected using duct collar kit, airstreams may be switched.



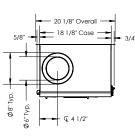
#### ABBREVIATIONS

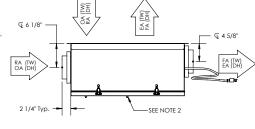
ABBREVIATIONS
EA: Exhaust Air to outside
OA: Outside Air intake
RA: Room Air to be exhausted
FA: Fresh Air to inside
TW: Thru Wall
DH: Duct Hung

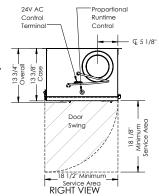
INSTALLATION ORIENTATION

NOTE
1.UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE ROUNDED TO THE
NEAREST EIGHTH OF AN INCH.

3. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.







LEFT VIEW

FRONT VIEW





NEW INDOOR UNIT



#### **Energy Recovery Ventilator EC** Motor



#### **SPECIFICATIONS**

#### **Ventilation Type:**

Static plate, heat and humidity transfer

Typical Airflow Range: 30-130 CFM

Unit is HVI Tested/Certified per CSA C439

Protocol: Using one L-30-G5 Core

#### Standard Features:

White painted cabinet Line-cord power supply
Low-voltage circuit for controls
Unit may be mounted in any orientation Cross-core differential pressure ports Dial-A-Flow: balance and airflow adjustment Variable speed Boost-mode

#### **Controls:**

Onboard digital controller with independent variable speeds

#### Filters:

Total qty. 2, MERV 8, spun-polyester media: 7 1/2" x 10 1/2" x 1"

Unit Weight: 32 lbs.

Max. Shipping Dimensions & Weight (in carton): 30" L x 22" W x 15" H

38 lbs.

Qty. 2, 110V EC motorized impellers

#### Accessories:

Backdraft damper: 6", 8" Automatic balancing damper: 4", 5", 6" Louvered wall vent 8": taupe vinyl, galvanized, paintable galvanneal
Louvered wall vent with 8" round duct connection:

12" W x 8" H Hooded wall vent 8": galvanized, paintable galvanneal

Digital time clock: wall mount (TC7D-W), in exterior enclosure (TC7D-E)

Carbon dioxide sensor/control: wall mount (CO2-W), duct mount (CO2-D)

IAQ sensor: wall mount (IAQ-W), duct mount (IAQ-D)

Motion occupancy sensor/control: ceiling mount (MC-C), wall mount (MC-W)

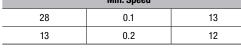
Push-button boost timer (PBT) Percentage timer control (PTL)

Percentage timer control with furnace interlock (FM) Push-button point-of-use controls (PBL), PTL req'd. MERV 13 filter: OA airstream (shipped loose)

Electric duct heater: RH series (1-6 kW); designed for indoor ductwork installation only

#### EC MOTOR OPERATING RANGE

Sample Points Depicted in Larger Dots				
Airflow (CFM)	External Static Pressure (Inches Water Column)	Unit Power Consumption (Watts)		
	Max. Speed			
138	0.1	137		
131	0.2	136		
125	0.3	134		
119	0.4	133		
112	0.5	133		
106	0.6	130		
97	0.7	128		
91	0.8	124		
83	0.9	121		
74	1.0	116		
56	1.2	98		
35	1.4	85		
	Min. Speed			
28	0.1	13		
13	0.2	12		



Note: Watts is for the entire unit.

Note: Airflow performance includes effect of clean, standard filter supplied with unit.

Note: Refer to CORES for specific operating point electrical data.

#### 1.8 1.6 1.4 1.2 1.0 ESP 0.8 0.6 0.4 0.2 0.0 0 20 40 60 80 100 120 140 **CFM**

#### **CORE PERFORMANCE**

Airflow (CFM)	Sensible EFF%	Total EFF% Winter/Summer*					
	Max. Speed						
138	62	58/36					
131	64	59/38					
125	65	61/40					
119	66	62/41					
112	67	63/43					
106	68	65/45					
97	70	67/48					
91	71	68/49					
83	73	70/51					
74	75	71/54					
56	78	75/59					
35	82	80/65					
	Min. Speed						
28	83	81/67					
13	86	85/71					

Note: These are core-only ratings and are not HVI certified. HVI ratings apply to complete units only.

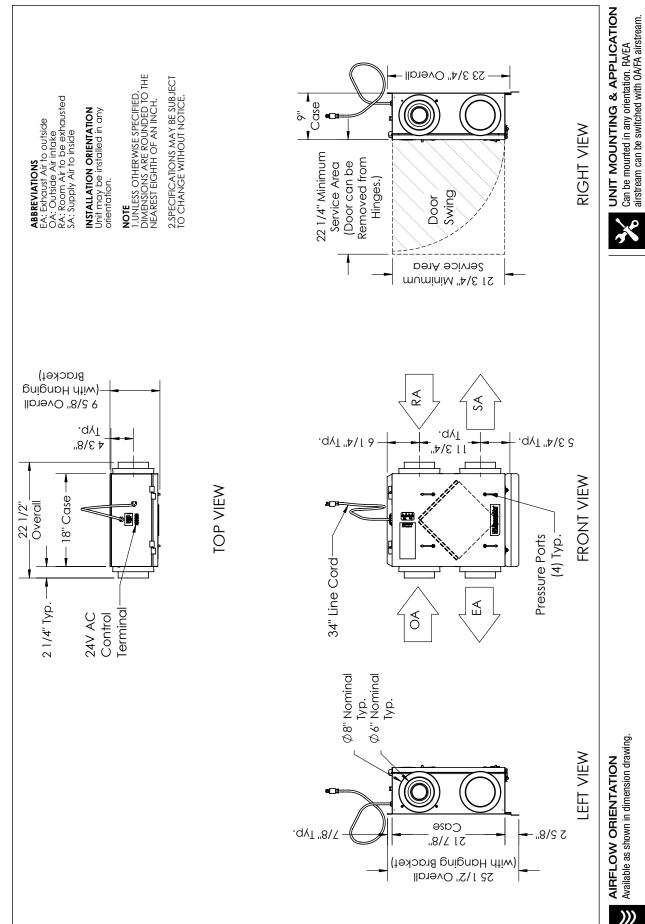
See HVI certification ratings on pg. 32 of Single/Multi-Family Catalog.

#### **ELECTRICAL DATA**

Watts	Volts	Hz	Phase	FLA per motor	Min. Cir. Amps	Max. Overcurrent Protection Device
53	120	60	1	0.85	10	10



# EC Motor **Energy Recovery Ventilator EV Premium S**









## PREMIUM M

## Energy Recovery Ventilator EC Motor





#### **SPECIFICATIONS**



Static plate, heat and humidity transfer

Typical Airflow Range: 30-225 CFM

Unit is HVI Tested/Certified per CSA C439 Protocol: Using one L-50-G5 Core

Standard Features:

White painted cabinet Line-cord power supply
Low-voltage circuit for controls
Unit may be mounted in any orientation Cross-core differential pressure ports Dial-A-Flow: balance and airflow adjustment Variable speed

#### Boost-mode **Controls:**

Onboard digital controller with independent variable speeds

#### Filters:

Total qty. 2, MERV 8, spun-polyester media: 10 1/2" x 10 1/2" x 1"

Unit Weight: 36 lbs.

Max. Shipping Dimensions & Weight (in carton): 32" L x 22" W x 18" H

48 lbs.

Qty. 2, 115V EC motorized impellers

#### Accessories:

Backdraft damper: 6", 8" Automatic balancing damper: 4", 5", 6" Louvered wall vent 6": white, brown Louvered wall vent 8": taupe vinyl, galvanized, paintable galvanneal

Louvered wall vent with 8" round duct connection:

12" W x 8" H Hooded wall vent 8": galvanized, paintable galvanneal

Digital time clock: wall mount (TC7D-W), in exterior enclosure (TC7D-E)

Carbon dioxide sensor/control: wall mount (CO2-W), duct mount (CO2-D)

IAQ sensor: wall mount (IAQ-W), duct mount (IAQ-D)

Motion occupancy sensor/control: ceiling mount (MC-C), wall mount (MC-W)

Push-button boost timer (PBT) Percentage timer control (PTL)

Percentage timer control with furnace interlock (FM) Push-button point-of-use controls (PBL), PTL req'd. MERV 13 filter: OA airstream (shipped loose)

Electric duct heater: RH series (1-6 kW); designed for indoor ductwork installation only

#### EC MOTOR OPERATING RANGE

Sample Points Depicted in Larger Dots				
Airflow (CFM)	External Static Pressure (Inches Water Column)	Unit Power Consumption (Watts)		
	Max. Speed			
233	0.1	179		
225	0.2	176		
216	0.3	177		
210	0.4	174		
201	0.5	173		
193	0.6	172		
184	0.7	170		
176	0.8	168		
163	0.9	166		
150	1.0	162		
117	1.2	148		
86	1.4	134		
48	1.6	112		
Min. Speed				
18	0.1	16		



**ELECTRICAL DATA** 

60

**Volts** Ηz

120

Watts

85

Note: Airflow performance includes effect of clean, standard filter supplied with unit.

Note: Refer to CORES for specific operating point electrical data.

**Phase** 

#### 2.0 1.8 1.6 1.4 1.2 1.0 0.8 0.6 0.4 0.2 0.0 0 100 150 200 250 50 CFM

#### **CORE PERFORMANCE**

Airflow (CFM)	Sensible EFF%	Total EFF% Winter/Summer*
	Max. Speed	
233	58	49/26
225	59	50/27
216	60	51/28
210	61	52/30
201	62	53/32
193	63	54/34
184	64	56/36
176	66	57/38
163	67	59/40
150	69	61/42
117	73	67/49
86	77	72/56
48	82	78/63
	Min. Speed	
18	86	84/71

Note: These are core-only ratings and are not HVI certified.

HVI ratings apply to complete units only. See HVI certification ratings on pg. 32 of Single/Multi-Family Catalog.



FLA

per

motor

1.22

Min.

Cir.

**Amps** 

10

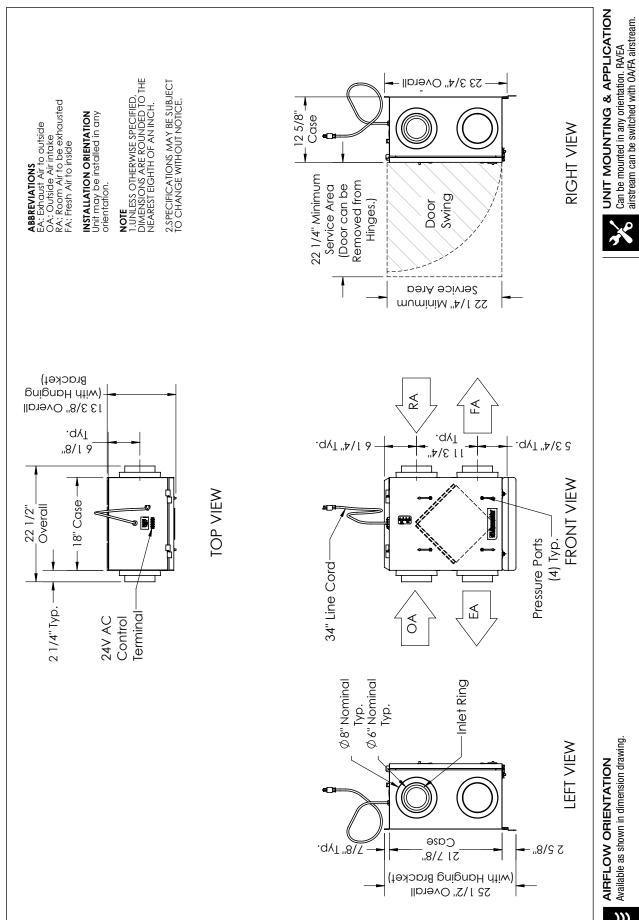
Max.

Overcurrent

Protection

Device

10











#### **Energy Recovery Ventilator** EC Motor





#### **SPECIFICATIONS**

Ventilation Type: Static plate, heat and humidity transfer

Typical Airflow Range: 30-280 CFM

Unit is HVI Tested/Certified per CSA C439 **Protocol:** Using one L-100-G5 Core

#### Standard Features:

White painted cabinet Line-cord power supply Low-voltage circuit for controls Unit may be mounted in any orientation Cross-core differential pressure ports Dial-A-Flow: balance and airflow adjustment Variable speed Boost-mode

#### Controls:

Onboard digital controller with independent variable speeds

#### Filters:

Total qty. 2, MERV 8, spun-polyester media: 10 1/2" x 21 3/4" x 1"

Unit Weight: 52 lbs.

Max. Shipping Dimensions & Weight (in carton): 33" L x 22" W x 29" H

66 lbs.

Motor(s): Qty. 2, 115V EC motorized impellers

#### Accessories:

Backdraft damper: 6", 8" Automatic balancing damper: 4", 5", 6" Louvered wall vent 6": white, brown Louvered wall vent 8": taupe vinyl, galvanized, paintable galvanneal

Louvered wall vent with 8" round duct connection:

12" W x 8" H

Hooded wall vent 8": galvanized, paintable galvanneal Digital time clock: wall mount (TC7D-W), in exterior enclosure (TC7D-E)

Carbon dioxide sensor/control: wall mount (CO2-W), duct mount (CO2-D)

IAQ sensor: wall mount (IAQ-W), duct mount (IAQ-D)

Motion occupancy sensor/control:
ceiling mount (MC-C), wall mount (MC-W)

Push-button boost timer (PBT)
Percentage timer control (PTL)
Percentage timer control with furnace interlock (FM)

Push-button point-of-use controls (PBL), PTL req'd. MERV 13 filter: OA airstream (shipped loose) Electric duct heater: RH series (1–8 kW);

designed for indoor ductwork installation only

#### EC MOTOR OPERATING RANGE

Sample Points Depicted in Larger Dots					
Airflow (CFM)	External Static Pressure (Inches Water Column)	Unit Power Consumption (Watts)			
	Max. Speed				
288	0.1	177			
280	0.2	178			
269	0.3	179			
261	0.4	180			
252	0.5	180			
244	0.6	180			
233	0.7	179			
222	0.8	179			
212	0.9	178			
199	1.0	176			
170	1.2	170			
136	1.4	160			
93	1.6	142			
36	1.8	110			
	Min. Speed				
67	0.1	19			
36	0.2	17			

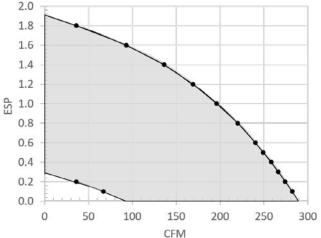
Note: Watts is for the entire unit.

Note: Airflow performance includes effect of clean, standard filter supplied with unit.

Note: Refer to CORES for specific operating point electrical data.

#### **ELECTRICAL DATA**

Watts	Volts	Hz	Phase	FLA per motor	Min. Cir. Amps	Max. Overcurrent Protection Device
85	120	60	1	1.22	10	10



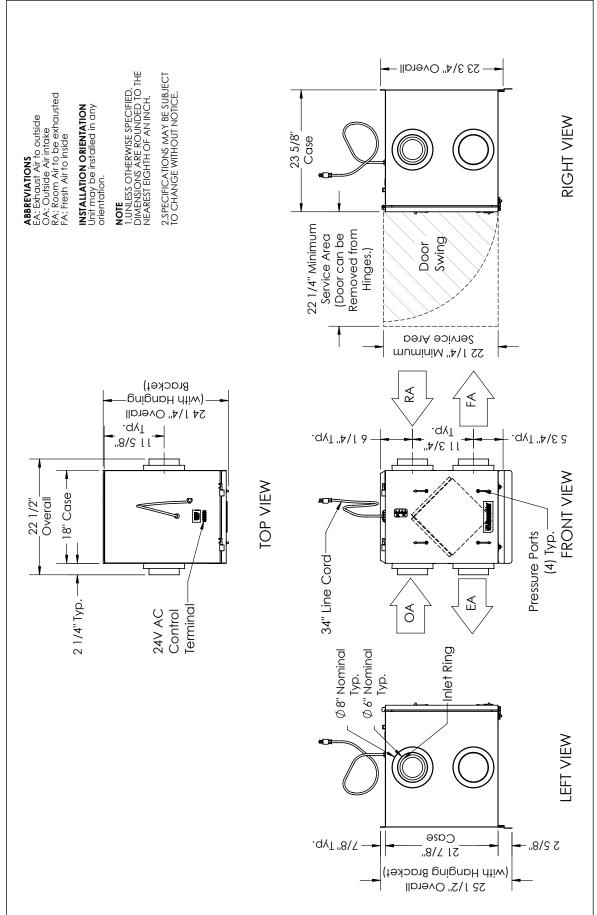
#### CORE PERFORMANCE

CORE PERFORMANCE				
Airflow (CFM)	Sensible EFF%	Total EFF% Winter/Summer*		
	Max. Speed			
288	71	63/45		
280	71	64/46		
269	72	65/47		
261	72	65/48		
252	73	66/49		
244	73	67/50		
233	74	68/51		
222	75	69/52		
212	75	69/53		
199	76	70/54		
170	78	73/57		
136	80	75/60		
93	83	79/64		
36	86	83/69		
	Min. Speed			
67	85	81/67		
36	86	83/69		

Note: These are core-only ratings and are not HVI certified.

HVI ratings apply to complete units only. See HVI certification ratings on pg. 32 of Single/Multi-Family Catalog.







**UNIT MOUNTING & APPLICATION**Can be mounted in any orientation. RA/EA airstream can be switched with OA/FA airstream.



AIRFLOW ORIENTATION Available as shown in dimension drawing.







#### **Energy Recovery Ventilator**





#### **SPECIFICATIONS**

#### **Ventilation Type:**

Static plate, heat and humidity transfer

Typical Airflow Range: 40-110 CFM

Unit is HVI Tested/Certified per CSA C439 Protocol: Using one L-35-G5 Core

#### **Standard Features:**

White painted cabinet Line-cord power supply
Low-voltage circuit for controls Unit may be mounted in any orientation Cross-core differential pressure ports

#### Control:

Onboard 24VAC transformer/relay package

#### Filters:

Total qty. 2, MERV 8, spun-polyester media: 9 5/8" x 10 1/2" x 1"

Unit Weight: 36 lbs.

Max. Shipping Dimensions & Weight (in carton): 29" L x 22" W x 15" H

40 lbs

Motor(s): Qty. 2, Standard motorized impeller blowers

#### Accessories:

Backdraft damper: 6", 8" Automatic balancing damper: 4", 5", 6" Louvered wall vent 6": white, brown Digital time clock: wall mount (TC7D-W), in exterior enclosure (TC7D-E)

Carbon dioxide sensor/control: wall mount (CO2-W), duct mount (CO2-D)

IAQ sensor: wall mount (IAQ-W), duct mount (IAQ-D)

Motion occupancy sensor/control: ceiling mount (MC-C), wall mount (MC-W)
Percentage timer control (PTL)

Percentage timer control (FTL)
Push-button point-of-use controls (PBL), PTL req'd.
Percentage timer control with furnace interlock (FM)
MERV 13 filter: OA airstream (shipped loose) Electric duct heater: RH series (1-3 kW); designed for indoor ductwork installation only

#### **ELECTRICAL DATA**

HP	Volts	Hz	Phase	Input Watts	FLA
0.03	120	60	Single	46 @ 90 CFM	0.35

#### **UNIT PERFORMANCE**

Airflow CFM	ESP in H <sub>2</sub> 0
36	0.60
53	0.50
68	0.40
81	0.30
93	0.20
108	0.10

#### **CORE PERFORMANCE**

Airflow CFM	Temp EFF%	Total EFF% Winter/Summer*
36	78	75/65
53	74	69/58
68	70	65/53
81	67	61/49
93	64	58/45
108	61	55/42

Note: These are core-only ratings and are not HVI certified.

HVI ratings apply to complete units only.

See HVI certification ratings on pg. 32 of Single/Multi-Family Catalog.

#### **UNIT DIMENSIONS**



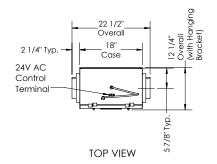
#### AIRFLOW ORIENTATION

Available as shown in dimension drawing.



#### **UNIT MOUNTING & APPLICATION**

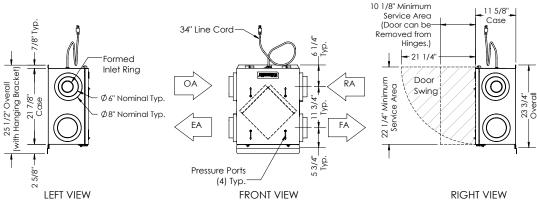
Can be mounted in any orientation. RA/EA airstream can be switched with OA/FA airstream.



ABBREVIATIONS
EA: Exhaust Air to outside
OA: Outside Air intake
RA: Room Air to be exhausted
FA: Fresh Air to inside

INSTALLATION ORIENTATION Unit may be installed in orientation.

NOTE
1. UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE ROUNDED TO THE
NEAREST EIGHTH OF AN INCH.







## **Energy Recovery Ventilator**





#### **SPECIFICATIONS**

#### **Ventilation Type:**

Static plate, heat and humidity transfer

Typical Airflow Range: 40-110 CFM

Unit is HVI Tested/Certified per CSA C439 Protocol: Using one L-100-G5 Core

#### **Standard Features:**

White painted cabinet Line-cord power supply Low-voltage circuit for controls Unit may be mounted in any orientation Cross-core differential pressure ports

#### **Controls:**

Onboard 24VAC transformer/relay package

#### Filters:

Total qty. 2, MERV 8, spun-polyester media: 10 1/2" x 21 3/4" x 1"

Unit Weight: 51 lbs.

87

100

108

Max. Shipping Dimensions & Weight (in carton): 33" L x 22" W x 29" H

65 lbs.

Motor(s): Qty. 2, Standard motorized impeller blowers

#### Accessories:

**CORE PERFORMANCE** 

Accessories:
Backdraft damper: 6", 8"
Automatic balancing damper: 4", 5", 6"
Louvered wall vent 6": white, brown
Digital time clock: wall mount (TC7D-W),
in exterior enclosure (TC7D-E)
Carbon dioxide sensor/control: wall mount (C02-W),
duct mount (C02-D)

IAQ sensor: wall mount (IAQ-W), duct mount (IAQ-D)

Motion occupancy sensor/control: ceiling mount (MC-C), wall mount (MC-W) Percentage timer control (PTL)

Push-button point-of-use controls (PBL), PTL req'd. Percentage timer control with furnace interlock (FM) MERV 13 filter: OA airstream (shipped loose) Electric duct heater: RH series (1-3 kW);

designed for indoor ductwork installation only

#### **ELECTRICAL DATA**

HP	Volts	Hz	Phase	Input Watts	FLA
0.03	120	60	Single	44 @ 90 CFM	0.35

#### **UNIT PERFORMANCE**

Airflow CFM	ESP in H <sub>2</sub> 0	Airflow CFM	
42	0.60	42	
55	0.50	55	
74	0.40	74	

0.30

0.20

0.10

Airflow CFM	lemp EFF%	Winter/Summer*
42	86	83/71
55	85	82/70
74	84	80/68
87	83	79/67
100	82	78/66
108	82	78/65

Note: These are core-only ratings and are not HVI certified. HVI ratings apply to complete units only.

See HVI certification ratings on pg. 33 of Single/Multi-Family Catalog.

#### **UNIT DIMENSIONS**



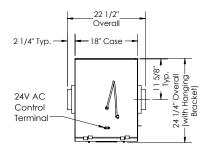
#### **AIRFLOW ORIENTATION**

Available as shown in dimension drawing.



#### **UNIT MOUNTING & APPLICATION**

Can be mounted in any orientation. RA/EA airstream can be switched with OA/FA airstream.



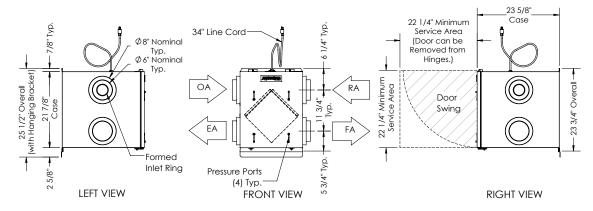
ABBREVIATIONS
EA: Exhaust Air to outside
OA: Outside Air intake
RA: Room Air to be exhausted
FA: Fresh Air to inside

**Total EFF%** 

INSTALLATION ORIENTATION Unit may be installed in any orientation.

NOTE
1.UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE ROUNDED TO THE
NEAREST EIGHTH OF AN INCH.

TOP VIEW







#### **Energy Recovery Ventilator**





#### **SPECIFICATIONS**

#### **Ventilation Type:**

Static plate, heat and humidity transfer

Typical Airflow Range: 50-140 CFM

Unit is HVI Tested/Certified per CSA C439 Protocol: Using one L-50-G5 Core

#### **Standard Features:**

White painted cabinet Line-cord power supply Low-voltage circuit for controls Unit may be mounted in any orientation Cross-core differential pressure ports

#### **Controls:**

Onboard 24VAC transformer/relay package

Total qty. 2, MERV 8, spun-polyester media: 10 1/2" x 10 1/2" x 1"

Unit Weight: 48 lbs.

#### Max. Shipping Dimensions & Weight (in carton): 32" L x 22" W x 18" H

60 lbs.

#### Motor(s):

Qty. 1, Double-shaft standard motor

#### Accessories:

Accessories:

Backdraft damper: 6", 8"

Automatic balancing damper: 4", 5", 6"

Louvered wall vent 6": white, brown

Digital time clock: wall mount (TC7D-W),

in exterior enclosure (TC7D-E)

Carbon dioxide sensor/control: wall mount (C02-W),

duct mount (C02-D)

ACC sensor: wall mount (AO-W), duct mount (AO-D)

IAQ sensor: wall mount (IAQ-W), duct mount (IAQ-D)

Motion occupancy sensor/control: ceiling mount (MC-C), wall mount (MC-W) Percentage timer control (PTL) Push-button point-of-use controls (PBL), PTL req'd. Percentage timer control with furnace interlock (FM) MERV 13 filter: OA airstream (shipped loose)

Electric duct heater: RH series (1-5 kW); designed for indoor ductwork installation only

#### **ELECTRICAL DATA**

HP	Volts	Hz	Phase	Input Watts	FLA
0.1	120	60	Single	102 @ 130 CFM	1.3

#### **UNIT PERFORMANCE**

Airflow CFM	ESP in H <sub>2</sub> 0
78	0.60
104	0.50
125	0.40
136	0.30
153	0.20
163	0.10

#### **CORE PERFORMANCE**

Airflow CFM	Temp EFF%	Total EFF% Winter/Summer*
78	78	73/59
104	75	69/54
125	72	66/50
136	71	64/48
153	68	61/45
163	67	59/42

Note: These are core-only ratings and are not HVI certified. HVI ratings apply to complete units only. See HVI certification ratings on pg. 33 of Single/Multi-Family Catalog.

#### **UNIT DIMENSIONS**



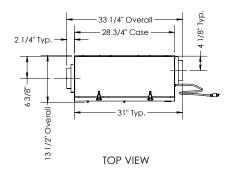
#### **AIRFLOW ORIENTATION**

Available as shown in dimension drawing.



#### **UNIT MOUNTING & APPLICATION**

Can be mounted in any orientation. RA/EA airstream can be switched with OA/FA airstream.

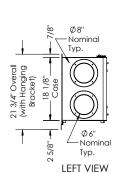


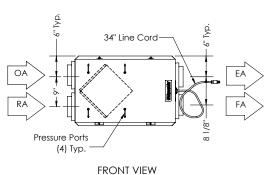
#### ABBREVIATIONS

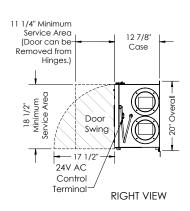
EA: Exhaust Air to outside
OA: Outside Air intake
RA: Room Air to be exhausted
FA: Fresh Air to inside

INSTALLATION ORIENTATION Unit may be installed in any orientation.

NOTE
1.UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE ROUNDED TO THE
NEAREST EIGHTH OF AN INCH.









#### **Energy Recovery Ventilator**





#### **SPECIFICATIONS**

#### **Ventilation Type:**

Static plate, heat and humidity transfer

Typical Airflow Range: 100-200 CFM

Unit is HVI Tested/Certified per CSA C439 Protocol: Using one L-100-G5 Core

#### **Standard Features:**

White painted cabinet Line-cord power supply Low-voltage circuit for controls Unit may be mounted in any orientation Cross-core differential pressure ports

#### **Controls:**

Onboard 24VAC transformer/relay package

Total qty. 2, MERV 8, spun-polyester media: 10 1/2" x 21 3/4" x 1"

Unit Weight: 68 lbs.

Max. Shipping Dimensions & Weight (on pallet): 34" L x 44" W x 34" H

110 lbs.

#### Motor(s):

Qty. 1, Double-shaft standard motor

#### Accessories:

Backdraft damper: 6", 8"

Automatic balancing damper: 4", 5", 6" Louvered wall vent 6": white, brown Louvered wall vent 8": taupe vinyl, galvanized,

paintable galvanneal

Louvered wall vent with 8" round duct connection: 12" W x 8" H

Hooded wall vent 8": galvanized, paintable galvanneal

Digital time clock: wall mount (TC7D-W),

in exterior enclosure (TC7D-E)

Carbon dioxide sensor/control: wall mount (CO2-W), duct mount (CO2-D)

IAQ sensor: wall mount (IAQ-W), duct mount (IAQ-D) Motion occupancy sensor/control:

ceiling mount (MC-C), wall mount (MC-W)

Percentage timer control (PTL) Push-button point-of-use controls (PBL), PTL reg'd. Percentage timer control with furnace interlock (FM)

MERV 13 filter: OA airstream (shipped loose) Electric duct heater: RH series (1-6 kW):

designed for indoor ductwork installation only

#### **ELECTRICAL DATA**

HP	Volts	Hz	Phase	Input Watts	FLA
0.1	120	60	Single	157 @ 181 CFM	1.5

#### **UNIT PERFORMANCE**

148

167

176 186

191 206

#### **CORE PERFORMANCE Airflow CFM** ESP in H<sub>2</sub>0 121 0.70

0.60

0.50 0.40

0.30 0.20

0.10

Airflow CFM	Temp EFF%	Total EFF% Winter/Summer*
121	81	77/64
148	79	75/61
167	78	73/59
176	78	72/58
186	77	72/58
191	77	71/57
206	76	70/56

Note: These are core-only ratings and are not HVI certified. HVI ratings apply to complete units only

See HVI certification ratings on pg. 33 of Single/Multi-Family Catalog.

#### **UNIT DIMENSIONS**



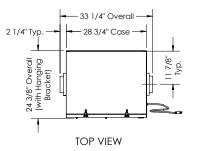
#### AIRFLOW ORIENTATION

Available as shown in dimension drawing.



#### **UNIT MOUNTING & APPLICATION**

Can be mounted in any orientation. RA/EA airstream can be switched with OA/FA airstream.

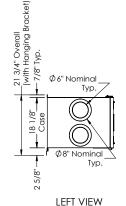


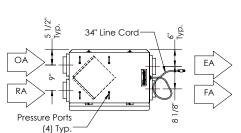
## ABBREVIATIONS EA: Exhaust Air to outside OA: Outside Air intake RA: Room Air to be exhausted FA: Fresh Air to inside

INSTALLATION ORIENTATION Unit may be installed in any orientation.

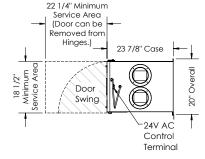
NOTE
1. UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE ROUNDED TO THE
NEAREST EIGHTH OF AN INCH.

2.SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.





FRONT VIEW



**RIGHT VIEW** 



#### **Energy Recovery Ventilator**





#### **SPECIFICATIONS**

#### **Ventilation Type:**

Static plate, heat and humidity transfer

Typical Airflow Range: 100-240 CFM

Unit is HVI Tested/Certified per CSA C439 Protocol: Using one L-100-G5 Core

#### **Standard Features:**

White painted cabinet Line-cord power supply Low-voltage circuit for controls Unit may be mounted in any orientation Cross-core differential pressure ports

#### **Controls:**

Onboard 24VAC transformer/relay package

#### Filters:

Total qty. 2, MERV 8, spun-polyester media: 10 1/2" x 21 3/4" x 1"

Unit Weight: 70 lbs.

Max. Shipping Dimensions & Weight (on pallet): 34" L x 44" W x 34" H

112 lbs.

#### Motor(s):

Qty. 1, Double-shaft standard motor

#### Accessories:

Backdraft damper: 6", 8" Automatic balancing damper: 4", 5", 6" Louvered wall vent 6": white, brown Louvered wall vent 8": taupe vinyl, galvanized, paintable galvanneal

Louvered wall vent with 8" round duct connection: 12" W x 8" H

Hooded wall vent 8": galvanized, paintable galvanneal

Digital time clock: wall mount (TC7D-W), in exterior enclosure (TC7D-E)

Carbon dioxide sensor/control: wall mount (CO2-W), duct mount (CO2-D)

IAQ sensor: wall mount (IAQ-W), duct mount (IAQ-D) Motion occupancy sensor/control:

ceiling mount (MC-C), wall mount (MC-W)
Percentage timer control (PTL)

Push-button point-of-use controls (PBL), PTL reg'd. Percentage timer control with furnace interlock (FM) MERV 13 filter: OA airstream (shipped loose) Electric duct heater: RH series (1-8 kW):

designed for indoor ductwork installation only

#### **ELECTRICAL DATA**

HP	Volts	Hz	Phase	Input Watts	FLA
0.2	120	60	Single	216 @ 236 CFM	3.3

#### **UNIT PERFORMANCE**

Airflow CFM	ESP in H <sub>2</sub> 0
170	0.80
195	0.70
214	0.60
229	0.50
242	0.40
250	0.30
256	0.20
265	0.10

#### **CORE PERFORMANCE**

Airflow CFM	Temp EFF%	Total EFF% Winter/Summer*
170	78	73/59
195	76	71/57
214	75	69/55
229	74	68/54
242	73	67/52
250	73	67/52
256	73	66/51
265	72	66/50

Note: These are core-only ratings and are not HVI certified.

HVI ratings apply to complete units only.

See HVI certification ratings on pg. 33 of Single/Multi-Family Catalog.

#### **UNIT DIMENSIONS**



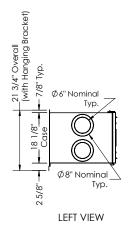
#### **AIRFLOW ORIENTATION**

Available as shown in dimension drawing.

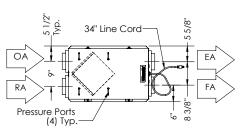


#### **UNIT MOUNTING & APPLICATION**

Can be mounted in any orientation. RA/EA airstream can be switched with OA/FA airstream.



33 1/4" Overall 28 3/4" Case 2 1/4" Typ. 24 3/8" Overall (with Hanging Bracket) TOP VIEW

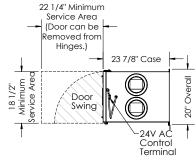


FRONT VIEW (HANGING BRACKET REMOVED FOR CLARITY)

ABBREVIATIONS
EA: Exhaust Air to outside
OA: Outside Air intake
RA: Room Air to be exhausted
FA: Fresh Air to inside

INSTALLATION ORIENTATION Unit may be installed in any orientation.

## NOTE 1.UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.



**RIGHT VIEW** 





#### **Energy Recovery Ventilator**





#### **SPECIFICATIONS**

#### **Ventilation Type:**

Static plate, heat and humidity transfer

Typical Airflow Range: 150-300 CFM

Unit is HVI Tested/Certified per CSA C439 Protocol: Using one L-100-G5 Core

#### **Standard Features:**

White painted cabinet Line-cord power supply Low-voltage circuit for controls Unit may be mounted in any orientation Cross-core differential pressure ports

#### **Controls:**

Onboard 24VAC transformer/relay package

#### Filters:

Total qty. 2, MERV 8, spun-polyester media: 10 1/2" x 21 3/4" x 1"

Unit Weight: 72 lbs.

Max. Shipping Dimensions & Weight (on pallet): 34" L x 44" W x 34" H

#### Motor(s):

Qty. 1, Double-shaft standard motor

#### Accessories:

Backdraft damper: 8"

Automatic balancing damper: 4", 5", 6" Louvered wall vent 8": taupe vinyl, galvanized,

paintable galvanneal

Louvered wall vent with 8" round duct connection: 12" W x 8" H

Hooded wall vent 8": galvanized, paintable galvanneal

Digital time clock: wall mount (TC7D-W), in exterior enclosure (TC7D-E)

Carbon dioxide sensor/control: wall mount (CO2-W), duct mount (CO2-D)

IAQ sensor: wall mount (IAQ-W), duct mount (IAQ-D)

Motion occupancy sensor/control: ceiling mount (MC-C), wall mount (MC-W)

Percentage timer control (PTL)

Push-button point-of-use controls (PBL), PTL reg'd. Percentage timer control with furnace interlock (FM) MERV 13 filter: OA airstream (shipped loose) Electric duct heater: RH series (1–10 kW);

designed for indoor ductwork installation only

#### **ELECTRICAL DATA**

HP	Volts	Hz	Phase	Input Watts	FLA
0.2	120	60	Single	315 @ 297 CFM	3.3

#### **UNIT PERFORMANCE**

Airflow CFM	ESP in H <sub>2</sub> 0
170	1.0
191	0.9
214	0.8
256	0.7
278	0.6
295	0.5
311	0.4

#### **CORE PERFORMANCE**

Airflow CFM	Temp EFF%	Total EFF% Winter/Summer*
170	78	73/59
191	77	71/57
214	75	69/55
256	73	66/51
278	71	65/49
295	70	63/47
311	69	62/46

Note: These are core-only ratings and are not HVI certified. HVI ratings apply to complete units only.

See HVI certification ratings on pg. 33 of Single/Multi-Family Catalog.

#### **UNIT DIMENSIONS**



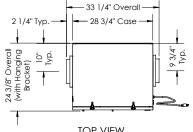
#### **AIRFLOW ORIENTATION**

Available as shown in dimension drawing.



#### **UNIT MOUNTING & APPLICATION**

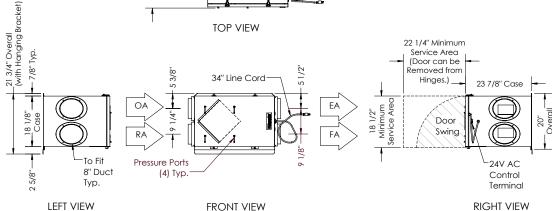
Can be mounted in any orientation. RA/EA airstream can be switched with OA/FA airstream.



ABBREVIATIONS
EA: Exhaust Air to outside
OA: Outside Air intake
RA: Room Air to be exhausted
FA: Fresh Air to inside

INSTALLATION ORIENTATION Unit may be installed in any orientation.

NOTE
1.UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE ROUNDED TO THE
NEAREST EIGHTH OF AN INCH.









#### **Energy Recovery Ventilator**





#### **SPECIFICATIONS**

#### **Ventilation Type:**

Static plate, heat and humidity transfer

Typical Airflow Range: 40-110 CFM

Unit is HVI Tested/Certified per CSA C439 Protocol: Using one L-35-G5 Core

#### Standard Features:

Unpainted galvanized cabinet Field wiring to terminal block Unit may be mounted in any orientation Cross-core differential pressure ports

#### Control:

Can use any switched line-voltage power supply (no low-voltage controls)

Total qty. 2, MERV 8, spun-polyester media: 9 5/8" x 10 1/2" x 1"

#### Unit Weight 36 lbs.

Max. Shipping Dimensions & Weight (in carton): 29" L x 22" W x 15" H 40 lbs.

Motor(s): Qty. 2, Standard motorized impeller blowers

#### Accessories:

Backdraft damper: 6", 8" Automatic balancing damper: 4", 5", 6"
Louvered wall vent 6": white, brown
120V line voltage Honeywell control
MERV 13 filter: OA airstream (shipped loose) Electric duct heater: RH series (1–3 kW);
designed for indoor ductwork installation only

#### **ELECTRICAL DATA**

HP	Volts	Hz	Phase	Input Watts	FLA
0.03	120	60	Single	46 @ 90 CFM	0.35

#### **UNIT PERFORMANCE**

Airflow CFM	ESP in H <sub>2</sub> 0
36	0.60
53	0.50
68	0.40
81	0.30
93	0.20
108	0.10

#### CORE PERFORMANCE

Airflow CFM	Temp EFF%	Total EFF% Winter/Summer*
36	78	75/65
53	74	69/58
68	70	65/53
81	67	61/49
93	64	58/45
108	61	55/42

Note: These are core-only ratings and are not HVI certified.

HVI ratings apply to complete units only.

See HVI certification ratings on pg. 32 of Single/Multi-Family Catalog.

#### **UNIT DIMENSIONS**



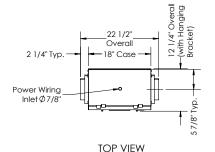
#### AIRFLOW ORIENTATION

Available as shown in dimension drawing.



#### **UNIT MOUNTING & APPLICATION**

Can be mounted in any orientation. RA/EA airstream can be switched with OA/FA airstream.



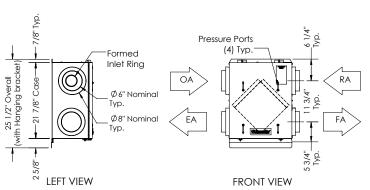
#### ABBREVIATIONS

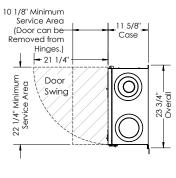
ABBREVIATIONS
EA: Exhaust Air to outside
OA: Outside Air intake
RA: Room Air to be exhausted
FA: Fresh Air to inside

**INSTALLATION ORIENTATION**Unit may be installed in any orientation.

NOTE
1.UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE ROUNDED TO THE
NEAREST EIGHTH OF AN INCH.

2.SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.



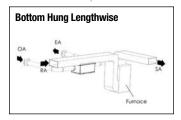


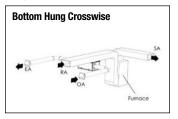
**RIGHT VIEW** 

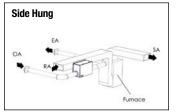


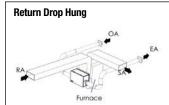
## APPLICATIONS—COMMON INSTALLATION APPROACHES

#### BR Series (BR70 and BR130)

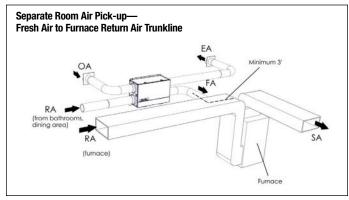




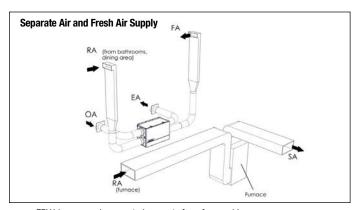




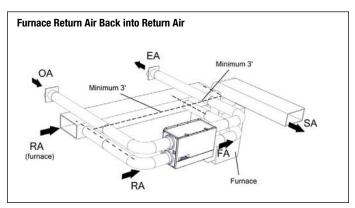
#### EV Series (EV130, EV200, EV240, and EV300)



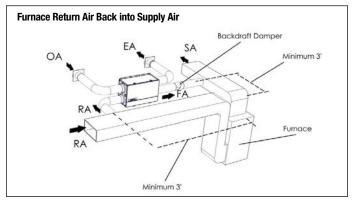
Note: ERV blower may be operated separate from furnace blower.



Note: ERV blower may be operated separate from furnace blower.

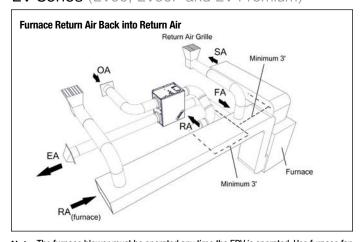


**Note:** The furnace blower must be operated any time the ERV is operated. Use furnace fan "on" continuous low speed or optional FM control to cycle furnace fan on ERV.



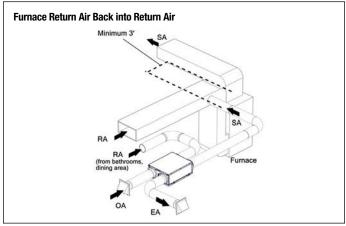
Note: ERV blower may be operated separate from furnace blower.

#### EV Series (EV90, EV90P and EV Premium)



"on" continuous low speed or optional FM control to cycle furnace fan on ERV.

#### SL Series (SL70H and SL70L)



Note: The furnace blower must be operated any time the ERV is operated. Use furnace fan Note: ERV blower may be operated separate from furnace blower.

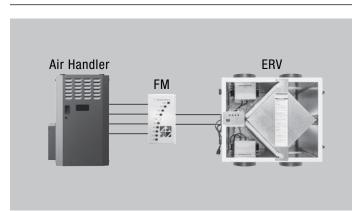
EA Exhaust Air; OA Outside Air; RA Room Air; SA Supply Air; FA Fresh Air



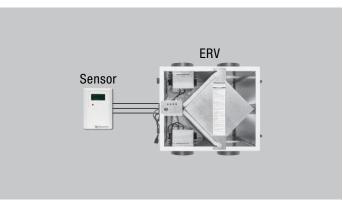
#### **CONTROL STRATEGIES**

See individual submittal pages for compatibility by model.

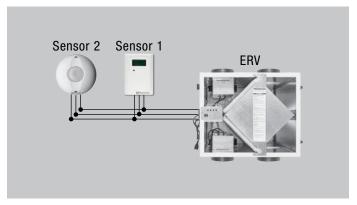
#### INTERLOCK WITH AIR HANDLER



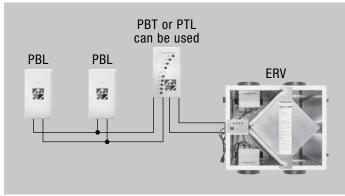
#### SINGLE CONTROL



#### **MULTIPLE CONTROLS**



#### PBT OR PTL WITH PBL



See individual submittal pages for compatibility by model.

#### **Controls**

Standard controls are intended to turn RenewAire single/multi-family energy recovery ventilation systems on and off at appropriate times. Installation and set-up is an easy process. RenewAire single/multi-family units are available standard with interface and controls.

**BR Series:** Built-in percentage run-time with furnace interlock

**GR Series:** 120V line voltage controls

EV Series: Percentage run timer or percentage run timer with furnace interlock and push button lighted controls

Digital time clock, CO2 sensors, IAQ sensors and motion occupancy sensors—Can be applied with external 24V supply

**EV Premium Series:** Built-in low voltage transformer for use with percentage run timer or push button lighted controls for on/off, continuous and/or boost mode operation

• Digital time clock, CO2 sensors, IAQ sensors and motion occupancy sensors—Can be applied with internal low voltage transformer

**SL Series:** Built-in low voltage transformer for use with percentage run timer or push button lighted controls for on/off, continuous and/or boost mode operation

• Digital time clock, CO2 sensors, IAQ sensors and motion occupancy sensors—Can be applied with internal low voltage transformer

## PERCENTAGE TIMER (PTL)

Primary control for SL70, EV90, EV90P, EV130, EV200, EV240, EV300 & EV Premium models

- Units can run an adjustable amount of time each hour
- Two-wire, low-voltage connection



## PERCENTAGE TIMER WITH FURNACE INTERLOCK (FM)

Alternate primary control for SL70, EV90, EV90P, EV130, EV200, EV240, EV300 & EV Premium models

- Low-voltage wire connects to EV unit and either thermostat or furnace control to turn on furnace blower
- · Six-wire, low-voltage connection



## PUSH-BUTTON POINT OF USE TIMER (PBL)

Secondary control used in combination with PTL control for SL70, EV90, EV90P, EV130, EV200, EV240, EV300 & EV Premium models

- Push-button control turns on unit from bathrooms or other intermittent exhaust locations
- · One-touch, 20-minute run-time
- Push 2 times for 40 minutes or 3 times for 60 minutes
- Two-wire, low-voltage connection to PTL control



PBL Control requires PTL Control

## PUSH-BUTTON BOOST TIMER (PBT)

Optional boost control for SL70 & EV Premium models only

- Push-button control sends unit to boost mode from bathrooms or other intermittent exhaust locations
- · One-touch, 20-minute run-time
- Push 2 times for 40 minutes or 3 times for 60 minutes
- Two-wire, low-voltage connection



PBT Control

Controls are continued on the next page.



See individual submittal pages for compatibility by model.

## Controls DIGITAL TIME CLOCK (TC7D-W, TC7D-E)

- Up to 8 on/off cycles per day or 56 per week
- 24VAC power requirement, external power supply must be provided if used with BR models, EV90, EV90P, EV130, EV200, EV240 and EV300
- Battery back-up
- Wall mount or outdoor enclosure options
- Wall mount fits any 4" x 4" electrical box



TC7D-W Wall Mount



TC7D-E Control In NEMA 3R Enclosures

#### CO2 SENSORS (CO2-W, CO2-D)

- Adjustable control from 400–2000 PPM
- · Digital display
- 24VAC power requirement, external power supply must be provided if used with BR models, EV90, EV90P, EV130, EV200, EV240 and EV300
- Computer/BAS interface for information and control
- Self calibrates during periods of low occupancy
- Wall mount or add duct mount accessory



CO2-W Wall Mount



CO2-D Duct Mount

#### IAQ SENSORS (IAQ-W, IAQ-D)

- Measures TVOC
- · Direct correlation to CO2 levels
- 0-2000 ppm CO2 equivalent output signal
- · Digital display on wall mount
- Selectable 0-5 or 0-10V dc signal
- 24VAC power requirement, external power supply must be provided if used with BR models, EV90, EV90P, EV130, EV200, EV240 and EV300
- · Internal menu for easy set-up



IAQ-W Wall Mount



IAQ-D Duct Mount

## MOTION OCCUPANCY SENSORS (MC-C, MC-W)

- · Passive infrared sensor
- Adjustable time-off delay to 30 minutes
- 24VAC power requirement, external power supply must be provided if used with BR models, EV90, EV90P, EV130, EV200, EV240 and EV300
- · Ceiling mount or directable wall mount
- · Coverage floor space
  - —Ceiling mount: 1500 sq. ft.
  - -Wall mount: 2500 sq. ft.
- · Major motion area
  - —Ceiling mount: 50 ft. diameter
  - -Wall mount: 68 x 50 ft.



MC-C Ceiling Mount



Wall Mount

## Mounting WALL BRACKET KIT (SL ONLY)

 For vertical installation on stud walls or field-supplied support/ backing panels



Filters
MERV 13 FILTERS

- Available for all single/multi-family ERVs
- · Electrostatically charged filter fibers
- · Single die-cut construction frame
- · Moisture-resistant construction
- High holding capacity design
- · Expanded metal reinforcement
- Shipped loose



**MERV 13 Filter** 



See individual submittal pages for compatibility by model.

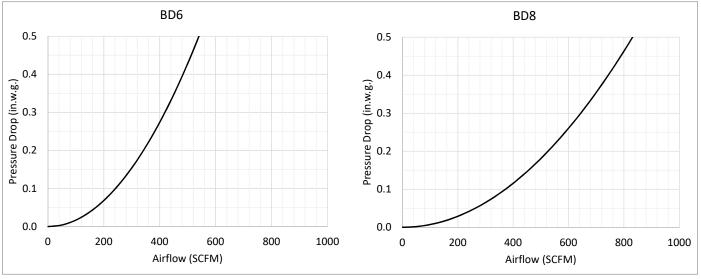
#### **Dampers**

#### 6" & 8" BACKDRAFT DAMPERS (BD6 & BD8)

- Mechanical "butterfly" design
- Male/female ends



#### **BD6 & BD8 PRESSURE DROP PERFORMANCE**



#### 4", 5" & 6" AUTOMATIC BALANCING DAMPERS (ABV-4, ABV-5 & ABV-6)

- Using physics, they will constrain the airflow volume to precise factory-calibrated volumes as marked on the front of the dampers.
  - First the desired airflow is set by moving the set-point adjustment arm to the desired airflow in CFM (cubic feet per minute).
  - Then the fixed stator blade applies the exact amount of tension on the moving damper blade to hold the airflow at its target.
  - Lastly, the pressure differential across the moving damper blade gives the blade lift to automatically adjust to changes in static pressure and air velocity. This is what gives it "pressure independence."





See individual submittal pages for compatibility by model.

#### **Louvered Wall Vents**

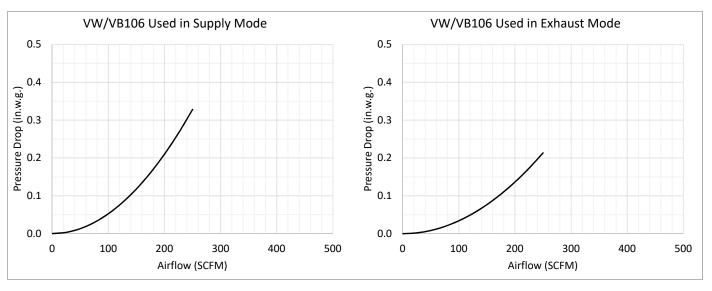
#### 6" VINYL (VB106 & VW106)

- Brown (VB) or white (VW)
- · Cleanable metal screen
- · Low pressure drop design





#### VB106 & VW106 PRESSURE DROP PERFORMANCE



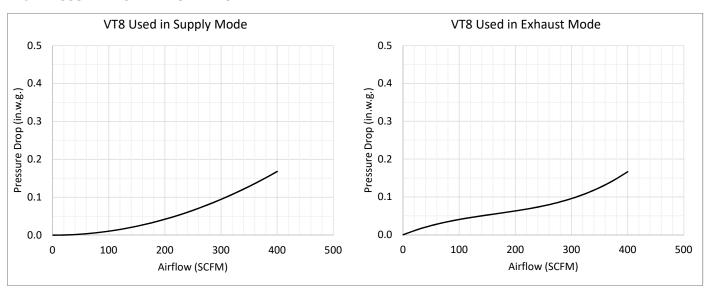
#### 8" VINYL (VT8)

Taupe

- · 4 removeable flaps
- 1 1/2" channel for siding
- 1/4" plastic screen



#### VT8 PRESSURE DROP PERFORMANCE



See individual submittal pages for compatibility by model.

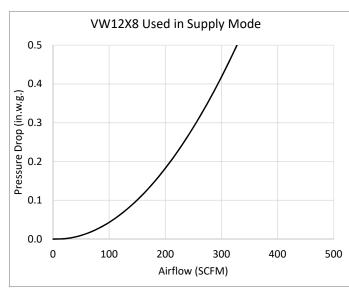
#### **Louvered Wall Vents**

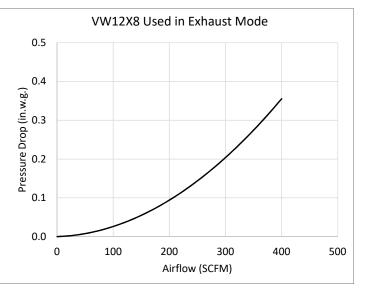
#### 12"X 8"X 8" GALVANIZED (VW12X8)

- Round duct connect
- 1/2" metal screen
- · Flush mount



#### VW12X8 PRESSURE DROP PERFORMANCE



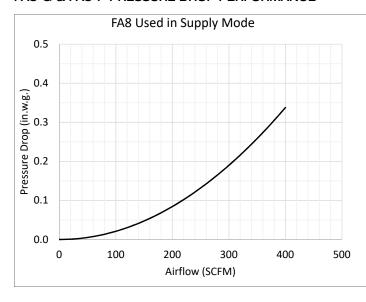


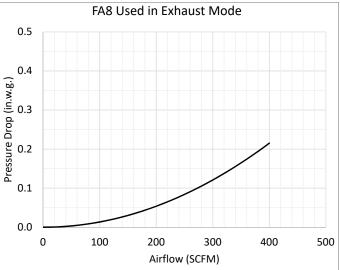
#### **Hooded Wall Vents**

#### 8" GALVANIZED (FA8-G) & W8" GALVANNEAL (FA8-P)

- Paintable (Galvanneal only)
- 1/4" metal screen

#### FA8-G & FA8-P PRESSURE DROP PERFORMANCE



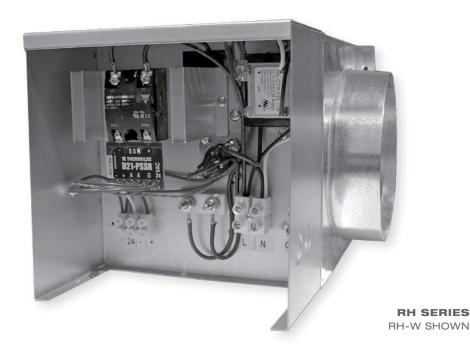




#### **RH Series Electric Duct Heater**

AVAILABLE ON SINGLE/MULTI-FAMILY AND LIGHT COMMERCIAL UNITS (SOME EXCEPTIONS APPLY)

RenewAire offers the highest-efficiency energy recovery ventilators (ERVs) on the market. However, during winter conditions, supply air from the ERV may be less than optimal for space conditions. By adding **RENEWAIRE'S ROUND ELECTRIC DUCT HEATER** as an option to our single/multi-family and light commercial ERVs, RenewAire can now heat supply air during cooler months to enhance indoor comfort, all via one package for ERVs and heaters from a single source.



#### **KEY BENEFITS**

- A single source reduces time and costs: A single information source, a single purchase point and a single approval package for ERVs and heaters reduces design time and costs, and streamlines logistics for design engineers and contractors.
- More flexibility: RenewAire offers design engineers the capacity to specify ERVs with a matching heater to boost flexibility and provide heated air to a single space or multiple spaces.
- Easy installation: A ZERO clearance rating to combustibles allows designers and contractors to apply RenewAire heaters with less restrictions onsite.
- Ultimate reliability: RenewAire heaters come with our two-year warranty and unmatched reliability. Single-source responsibility offers contractors and end users peace of mind and a single call location for technical, start-up and commissioning questions.
- Highly certified: CSA certified and evaluated to the applicable ANSI/UL and CSA Standards, for use in the U.S. and Canada.





#### Electric Duct Heater (1-11.5 kW)

Accessory



#### **ELECTRIC DUCT HEATER**



RH-D (Integral Thermostat)



RH-W (Wall-Mount Thermostat)

#### **SPECIFICATIONS**

#### **Heater Type:**

Electric Duct Heater

Typical kW Range:

1–11.5 kW (1, 2, 3, 4, 5, 6, 8, 10, 11.5 kW)

#### Voltages & Phase:

Single phase: 120, 208 and 240V

#### **Control Voltage:**

24VAC

#### **Controllable Output Temperature Range:**

RH-D: 5 to 131° F RH-W: -3 to 130° F

#### **Standard Features:**

Open-coil element High-grade, nickel-chrome element wire Thermostat: Integral (RH-D),

Wall mount (RH-W)

Modulating heat output (SCR control) Vertical or horizontal operation

Automatic limit switch for primary

over-temperature protection

Manual reset limit switch for secondary

over-temperature protection

Airflow sensor

Standard control transformer: 24VAC Corrosion-resistant galvanized steel Round duct collars

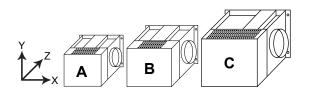
High-voltage terminal block connections Grounding lug

Mounting flanges

#### **Accessories:**

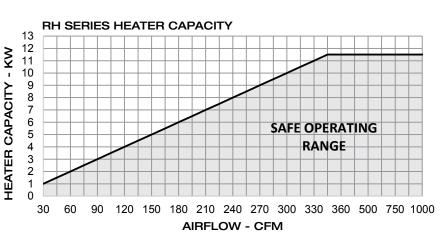
Temperature sensor: Duct mount (DS-600)
Digital time clock: wall mount (TC7D-W),
in exterior enclosure (TC7D-E)
Motion occupancy sensor/control:
ceiling mount (MC-C), wall mount (MC-W)

Note: Electric duct heater designed for indoor ductwork installation only.



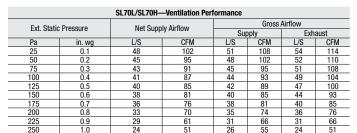
Duct Collars	kW	Volts	Size	Width (X)	Height (Y)	Depth (Z)	Max. Wt. (lbs.)
6"	1, 2	120, 208, 240	Α	11 1/2"	8"	11 1/2"	10
8"	3, 4, 5	208	В	11 1/2"	10"	13 1/2"	15
8"	3, 4, 5, 6	240	В	11 1/2"	10"	13 1/2"	15
10"	3, 4, 5	208	С	15 1/2"	12"	15 1/2"	20
10"	3, 4, 5, 6, 8, 10, 11.5	240	С	15 1/2"	12"	15 1/2"	20
12"	6, 8, 10, 11.5	240	С	15 1/2"	12"	15 1/2"	20

Minimum Airflow (CFM)	Heater Capacity (kW)
30	1.00
60	2.00
90	3.00
120	4.00
150	5.00
180	6.00
240	8.00
300	10.00
345	11.50



#### **HVI TESTED/CERTIFIED**

#### PER CSA C439



® 2100 ■.
HVI
CERTIFIED

SL70L/SL70H—Energy Performance											
Supply Net Airflow Temperature			irflow	Average Power	Sensible Recovery	Adjusted Sensible Recovery		Net Moisture			
C° F° L/S CFM Watts Efficiency % Efficiency % Transfer %											
Heatin	ıg										
0°	32°	25	53	30	64	6	8	63			
Coolin	a				Total		Ad	djusted Total			
Recovery Efficiency % Recovery Efficiency %											
35° 95° 25 53 30 56 58											

	BR130—Ventilation Performance												
Evt Stati	c Pressure	Net Supply Airflow			Gross Airflow								
LAL SIGH	C F I Cooule	iver Supp	ny Ali now	Sup	oply	Exh	aust						
Pa	in. wg	L/S	CFM	L/S	CFM	L/S	CFM						
25	0.1	70	148	71	150	75	159						
50	0.2	66	140	67	142	69	146						
75	0.3	62	131	63	133	64	136						
100	0.4	53	112	54	114	56	119						
125	0.5	44	93	45	95	47	100						
150	0.6	32	68	33	70	29	61						
175	0.7	24	51	25	53	21	44						

	BR130—Energy Performance												
	oply erature	Net Airflow		Average Power Watts	Sensible Recovery Efficiency %	Adjusted Sensible Recovery		Net Moisture Transfer %					
C°	F°	L/S	CFM	Power walls	Efficiency %	Efficie	ncy %	Iransiei %					
Heati	Heating												
0°	32°	58	123	121	72	7	8	55					
Coolii	20				Total		Ad	djusted Total					
GUUIII	Cooling Recovery Efficiency % Recovery Efficiency %												
35°													

	EV Premium S—Ventilation Performance												
Evt Static	: Pressure	Net Supply Airflow		Gross Airflow									
LAL SIALIC	Ficosule	iver oupp	iy Aii ilow	Sur	ply	Exh	aust						
Pa	in. wg	L/S	CFM	L/S	CFM	L/S	CFM						
25	0.1	65	138	69	146	68	144						
50	0.2	62	131	65	138	64	136						
75	0.3	59	125	62	131	61	129						
100	0.4	56	119	59	125	57	121						
125	0.5	53	112	56	119	54	114						
150	0.6	50	106	52	110	50	106						
175	0.7	46	97	49	104	46	97						
200	0.8	43	91	45	95	42	89						
225	0.9	39	83	41	87	37	78						
250	1.0	35	74	37	78	32	68						

	EV Premium S—Energy Performance										
Supply Temperature Net Airflo		irflow	Average Power Watts	Sensible Recovery	Adjusted Reco	Sensible very	Net Moisture Transfer %				
C°			CFM	M Power Watts Efficiency %		Efficiency %		Transier %			
Heating											
0°	32°	24	51	28	74	7	7	58			
0°	32°	36	76	48	69	7	3	49			
0°	32°	48	102	78	66	7	1	42			
Coolin					Total		Ad	djusted Total			
COOIII	Recovery Efficiency % Recovery Efficiency %										
35°											

	EV Premium M—Ventilation Performance												
Evt Static	: Pressure	Net Supply Airflow			Gross Airflow								
LAL SIGH	Ficosulc	iver oupp	ny Annow	Supply		Exhaust							
Pa	in. wg	L/S	CFM	L/S	CFM	L/S	CFM						
25	0.1	110	233	113	239	111	235						
50	0.2	106	225	109	231	107	227						
75	0.3	102	216	105	222	103	218						
100	0.4	99	210	102	216	99	210						
125	0.5	95	201	98	208	95	201						
150	0.6	91	193	94	199	90	191						
175	0.7	87	184	90	191	86	182						
200	0.8	83	176	85	180	81	172						
225	0.9	77	163	80	170	75	159						
250	1.0	71	150	73	155	69	146						

EV Premium M—Energy Performance												
	Supply Temperature		irflow	Average Power Watts	Sensible Recovery	Adjusted Reco		Net Moisture Transfer %				
C°	F°	L/S CFM		Power Watts Efficiency %		Efficiency %		Hansier 70				
Heating												
0°	32°	24	51	28	78	8	3	69				
0°	32°	48	102	48	74	77		60				
0°	32°	71	150	94	67	7	2	52				
0°	32°	93	197	172	64	6	9	45				
Coolin	~				Total		Ad	djusted Total				
COOIII	g				Recovery Efficie	ncy %	Recov	ery Efficiency %				
35°   95°   24   51   28   61							63					

EV Premium L—Ventilation Performance												
Evt Ctatio I	Ext. Static Pressure Net Supply Airflow Gross Airflow											
EXI. SIAIIL F			ivet Supply All llow			Exh	aust					
Pa	in. wg	L/S	CFM	L/S	CFM	L/S	CFM					
25	0.1	136	288	140	297	142	301					
50	0.2	132	280	136	288	138	292					
75	0.3	127	269	132	280	133	282					
100	0.4	123	261	127	269	128	271					
125	0.5	119	252	123	261	123	261					
150	0.6	115	244	118	250	118	250					
175	0.7	110	233	114	242	113	239					
200	0.8	105	222	108	229	108	229					
225	0.9	100	212	103	218	102	216					
250	1.0	94	199	97	206	97	206					

	EV Premium L—Energy Performance											
Sup Tempe		Net A	irflow	Average	Sensible Recovery	Adjusted Reco	Sensible very	Net Moisture				
C°	C° F° L/S CFM		CFM	Power Watts	Efficiency %	Efficiency %		Transfer %				
Heating												
0°	32°	29	61	25	83	8	6	77				
0°	32°	57	121	45	79	8	2	70				
0°	32°	95	201	124	72	7	7	60				
0°	32°	107	227	182	70	7	6	57				
Coolin					Total		A	djusted Total				
	iy				Recovery Efficie	ncy %	Recov	ery Efficiency %				
35°												

	EV90/GR90—Ventilation Performance												
Ext. Static Pressure Net Supply Airflow Gross Airflow													
EXI. SIdili	, riessuie	Net Supply Airliow		Supply		Exh	aust						
Pa	in. wg	L/S	CFM	L/S	CFM	L/S	CFM						
25	0.1	51	108	52	110	50	106						
50	0.2	44	93	46	97	44	93						
75	0.3	38	81	39	83	40	85						
100	0.4	32	68	32	68	35	74						
125	0.5	25	53	25	53	30	64						
150	0.6	17	36	18	38	26	55						

	Supply Temperature		irflow	Average Power Watts	Sensible Recovery Efficiency %	Adjusted Sensible Recovery		Net Moisture Transfer %
C°	F°	L/S	CFM	Power walls	Efficiency %	Efficie	ncy %	Iransier %
Heatin	g							
0°	32°	42	89	42	64	67		37
Coolin	a .				Total		Ad	djusted Total
Cooling					Recovery Efficie	ncy %	Recov	ery Efficiency %
35°	95°	42	89	38	46			48

EV90/GR90—Energy Performance



#### **HVI TESTED/CERTIFIED**

PER CSA C439



	EV90P—Ventilation Performance												
Ext. Static Pressure Net Supply Airflow Gross Airflow													
EXI. SIAIII	, riessuie	ivet oupp	ny Ali now	Sup	ply	Exh	aust						
Pa	in. wg	L/S	CFM	L/S	CFM	L/S	CFM						
25	0.1	51	108	52	110	52	110						
50	0.2	47	100	48	102	47	100						
75	0.3	41	87	42	89	42	89						
100	0.4	35	74	36	76	36	76						
125	0.5	26	55	27	57	27	57						
150	0.6	20	42	20	42	21	44						

				EV90P—En	ergy Performance					
	Supply Temperature Net Airflow		irflow	Average Power Watts	Sensible Recovery Efficiency %	Adjusted Reco		Net Moisture Transfer %		
C°	F°	L/S	CFM	walls	Efficiency %	Efficie	ncy %	Iransiei %		
Heatin	Heating									
0°	32°	42	89	44	80	8	3	64		
Cooling Total Adjusted Total Recovery Efficiency % Recovery Efficiency %										
35° 95° 42 89 44 63 71										

	EV130—Ventilation Performance									
Ext Ctatio	Droouro	Net Supply Airflow			Gross A	Airflow				
EXI. SIAIII	Ext. Static Pressure		IY AII IIOW	Sup	ply	Exh	aust			
Pa	in. wg	L/S	CFM	L/S	CFM	L/S	CFM			
25	0.1	77	163	79	167	79	167			
50	0.2	72	153	73	155	73	155			
75	0.3	64	136	66	140	66	140			
100	0.4	59	125	61	129	61	129			
125	0.5	49	104	50	106	50	106			
150	150 0.6		78	38	81	38	81			

				EV130—Ene	ergy Performance					
	Supply Temperature Net Airflow		irflow	Average Power	Sensible Recovery	Adjusted :		Net Moisture		
C°	F°	L/S	CFM	Watts	Efficiency %	Efficier	ncy %	Transfer %		
Heatin	Heating									
0°	32°	61	129	102	71	75	5	53		
Coolin	g							djusted Total ery Efficiency %		
35°	95°	61	129	102	48 51					

	EV200—Ventilation Performance										
Ext Statio	Droouro	Net Supply Airflow			Gross	Airflow					
EXI. SIdill	Ext. Static Pressure		IY AII IIOW	Sup	ply	Exh	aust				
Pa	in. wg	L/S	CFM	L/S	CFM	L/S	CFM				
25	0.1	97	206	100	212	109	231				
50	0.2	90	191	93	197	104	220				
75	0.3	88	186	90	191	101	214				
100	0.4	83	176	85	180	96	203				
125	0.5	79	167	81	172	88	186				
150	150 0.6		148	72	153	76	161				
175			121	59	125	68	144				

				EV200—Ene	ergy Performance					
	upply perature	Net A	irflow	Average Power	Sensible Recovery	Adjusted Sensible Recovery		Net Moisture Transfer %		
C°	F°	L/S	CFM	walls	Watts Efficiency % Efficiency %					
Hea	Heating									
0°	32°	85	180	157	78	84		62		
Coo	Cooling Total Adjusted Total									
	iiig				Recovery Efficie	ncy %	Recov	ery Efficiency %		
35°	95°	85	180	155	52			54		

EV240—Ventilation Performance										
Ext Static	Drogouro	Net Supply Airflow			Gross	Airflow				
EXI. SIdili	Ext. Static Pressure		IY AII IIOW	Su	oply	Exh	aust			
Pa	in. wg	L/S	CFM	L/S	CFM	L/S	CFM			
25	0.1	125	265	129	273	132	280			
50	0.2	121	256	124	263	126	267			
75	0.3	118	250	120	254	121	256			
100	0.4	114	242	116	246	117	248			
125	0.5	108	229	111	235	110	233			
150	0.6	101	214	103	218	102	216			
175	0.7	92	195	94	199	93	197			
200	0.8	80	170	82	174	79	167			

				EV240—Ene	ergy Performance				
Supply Temperature Net Airflow		Average Power Watts	Sensible Recovery Efficiency %  Adjusted S Recov			Net Moisture Transfer %			
C°	F°	L/S	CFM	walls	Efficiency %	Efficie	псу %	Iransier %	
Heating									
0°	32°	111	235	216	75	80	)	57	
Cooling Total Adjusted Total Recovery Efficiency % Recovery Efficiency %									
35°	95°	108	229	213	53			56	

EV300—Ventilation Performance										
Ext Ctatio	Ext. Static Pressure Net Supply Airflow Gross Airflow									
EXI. SIAIII	Ext. Static Pressure		IY AII IIOW	Sup	ply	Exh	aust			
Pa	in. wg	L/S	CFM	L/S	CFM	L/S	CFM			
100	0.4	147	311	150	318	143	303			
125	0.5	139	295	142	301	133	282			
150	0.6	131	278	133	282	125	265			
175	0.7	121	256	123	261	108	229			
200	0.8	101	214	103	218	94	199			
225	0.9	90	191	92	195	74	157			
250	1.0	80	170	82	174	47	100			

				EV300—Ene	ergy Performance					
	Supply Temperature Net Airflow		Average Power Watts	Sensible Recovery Efficiency %	Adjusted Sensible Recovery		Net Moisture Transfer %			
C°	F°	L/S	CFM	walls	Efficiency %	Efficie	ncy %	Iransier %		
Heatin	Heating									
0°	32°	139	295	315	67	7	3	54		
Coolin	g				Total Recovery Efficie			ljusted Total ery Efficiency %		
35° 95° 138 292 313 46 49						49				

## INDEPENDENTLY TESTED

PER CSA C439

	BR70—Ventilation Performance										
Ext Statio	Ext. Static Pressure Net Supply Airflow Gross Airflow										
EXI. SIGIIC	Ext. Static Pressure		ny Ali now	Supply		Exhaust					
Pa	in. wg	L/S	CFM	L/S	CFM	L/S	CFM				
25	0.1	41	86	42	89	46	97				
50	0.2	34	73	35	75	39	84				
75	0.3	28	59	29	61	32	69				
100	0.4	21	46	22	47	25	53				

Electrical	Requirements	Volts	120 Amps	1.0

BR70—Energy Performance											
Sup Tempe		Net A	irflow	Average Power Watts	Sensible Recovery	Adjusted Sensible Recovery		Net Moisture Transfer %			
C°	F°	L/S	CFM	walls	Efficiency %	Efficie	ncy %	Iransier %			
Heatin	Heating										
0°	32°	32	69	94	66	7	5	53			
Coolin	a .				Total		Ad	djusted Total			
GOOIIII	Recovery Efficiency % Recovery Efficiency %										
35°   95°   30   64   94   42   47											



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#### INDOOR AIR QUALITY MATTERS

- **Deficient IAQ** is an EPA **top-five** health risk
- People spend 90% of their time indoors
- Indoor air can be 2–5 times and up to 100 times more polluted than outdoor air

## BENEFITS OF INCREASED VENTILATION









#### **TECHNICAL/APPLICATIONS SUPPORT**

The goal of our technical-support team is to provide the **BEST CUSTOMER SERVICE** in the HVAC industry. You can count on our knowledgeable and seasoned staff for all your technical, application and service needs, and we'll respond quickly and effectively to answer any of your questions.

#### **CONTACT RENEWAIRE**



FOR TECHNICAL SUPPORT:

RenewaireSupport@renewaire.com



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or

RenewaireOrders@renewaire.com



## RELEVANT **EVERYWHERE**

#### **EVERY GEOGRAPHIC REGION**

Our ERVs excel in every geographic region.

#### **EVERY CLIMATE**

Our ERVs operate in every climate—from Alaska to Florida, and everywhere in between.

#### **EVERY PROJECT**

From massive skyscrapers to cozy residential homes, our ERVs can be used in every size project and in every code jurisdiction.

## RENEWAIRE TEMPERS THE AIR



Our ERVs moderate the extremes of outdoor supply-air temperature and humidity year-round, providing a sustainable solution for fresh air that feels like a perfect spring day.

## APPLIED EVERYWHERE

When indoor occupants breathe in unclean air, this harms their health and causes cognitive impairment. Our ERVs can provide cleaner and healthier indoor air for every type of building in the world, thus improving occupants' wellbeing, while also reducing energy costs.

#### RESIDENTIAL

The increased airtightness of newer and remodeled homes is causing deficient IAQ, resulting in more health problems for indoor occupants.

#### COMMERCIAL

As commercial buildings become more airtight, deficient IAQ is increasing and causing sickness, absenteeism and decreased productivity.

#### **HEALTHCARE**

The high occupant density of hospitals, nursing homes and other healthcare facilities results in deficient IAQ and ensuing health problems for patients and staff alike.

#### **RESTAURANTS/COFFEE SHOPS**

The large volume of indoor occupants in restaurants and coffee shops causes deficient IAQ and subsequent health problems.

#### RETAIL

The high level of foot traffic in retail stores leads to deficient IAQ and the potential sickness of shoppers, which can negatively impact sales.

#### DAYCARE

Crowded daycare facilities breed deficient IAQ, thus causing health problems for everyone—especially children who are more vulnerable.

#### **EDUCATION (LOWER AND HIGHER)**

With students and teachers packed into tight classrooms, instances of deficient IAQ go up, resulting in academic performance and test scores going down.

#### GOVERNMENT

Aging and crowded government buildings result in deficient IAQ, which can impair worker performance and productivity.

#### **EVERY TYPE OF BUILDING**

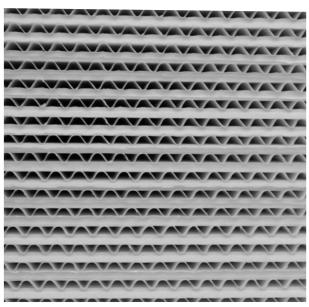
Every type of building can benefit from the enhanced IAQ generated by RenewAire ERVs, including veterinary clinics, nail salons and manufacturing facilities, among others.















#### RENEWAIRE EVERYWHERE

RenewAire ERVs can be applied everywhere across all commercial, educational, institutional, light industrial and residential buildings. Our technology excels in every geographic region, every climate and every size project.







