

ERV



SL & EV PREMIUM SERIES
SINGLE/MULTI-FAMILY ERV CATALOG

AUGUST 2024
RENEWAIRE.COM | 800.627.4499

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LOW PROFILE MULTI-FAMILY RESIDENTIAL/ LIGHT COMMERCIAL

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RESIDENTIAL/LIGHT COMMERCIAL

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INDOOR AIR QUALITY MATTERS

DEFICIENT INDOOR AIR QUALITY IS A THREAT

As **buildings get tighter to seal weather out, they seal in contaminants**, causing deficient indoor air quality (IAQ). Typical contaminants include off-gassing from carpeting, furniture and building materials, excess humidity and mold, odors, cooking and cleaning fumes, CO2, hair and fibers, to name a few.

Deficient IAQ is a threat since it can harm occupant health and cognitive function, damage structures and hurt the bottom line.

It's especially concerning since people spend about 90% of their time indoors, and indoor air can be two to five times—and up to 100 times—more polluted than outdoor air. The EPA ranks indoor air pollution as a top-five health risk.¹



ADVERSE EFFECTS OF DEFICIENT IAQ



HEALTH PROBLEMS

Deficient IAQ can cause allergies, headaches, coughs, asthma, skin irritations and breathing difficulties, as well as cancer, liver disease, kidney damage and nervous-system failure.



COGNITIVE IMPAIRMENT

Harvard and Berkeley Lab found that CO2—a constituent of exhaled breath—negatively impacts thinking and decision-making at levels commonly found indoors.²



DISEASE TRANSMISSION

Ventilation with outdoor air is vital to diluting airborne contaminants and decreasing disease transmission rates.



REDUCED PRODUCTIVITY

Berkeley Lab found that deficient IAQ can cost \$200 billion in debilitated worker performance and \$58 billion in lost sick time.³



Ventilation can enhance IAQ and decrease the transmission of airborne infectious diseases, including COVID-19: https://bit.ly/COVID19WP_22

¹ “Why Indoor Air Quality is Important to Schools,” U.S. Environmental Protection Agency (EPA), <https://bit.ly/2SoyRJc>.

² Romm, “Exclusive: Elevated CO2 Levels Directly Affect Human Cognition, New Harvard Study Shows,” Climate Progress, <https://bit.ly/2Vp6AE2>.

³ Alevantis, Berman, Mills, Perlman, “The Costs and Financial Benefits of Green Buildings,” U.S. Green Building Council (USGBC), <https://bit.ly/2KnP50c>.

ABOUT RENEWAIRE

For over 40 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 fifth-generation, enthalpic-core, static-plate Energy Recovery Ventilators (ERVs) and 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 energy-efficient air-moving technologies. For more information, visit: 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 cleaner and healthier air that feels like a perfect spring day.

APPLIED ANYWHERE

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 (K-12, COLLEGE/UNIVERSITY)

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.

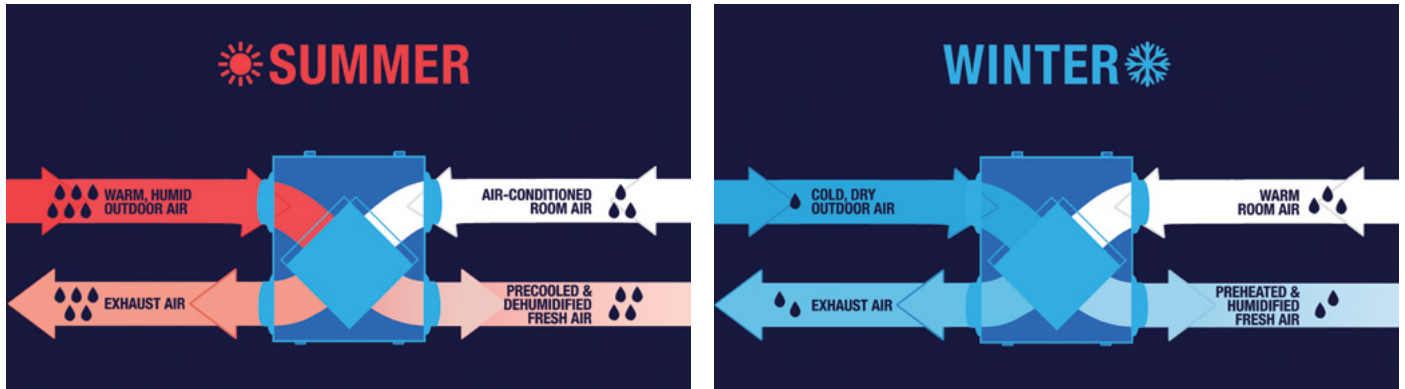


RENEWAIRE ERVs

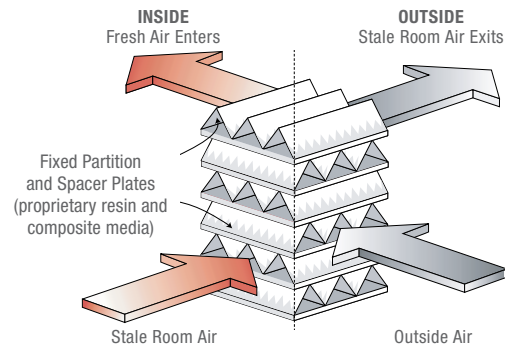
ACHIEVE SUSTAINABLE IAQ

OPTIMIZING ENERGY EFFICIENCY IN EVERY GEOGRAPHIC REGION OR CLIMATE

RenewAire residential ERVs are a sustainable ventilation solution. **Our static-plate, cross-flow core separates the outgoing, polluted indoor airstream from the incoming fresh airstream—while simultaneously transferring total energy** (heat and water vapor) between the two. Airstreams do not mix and pollutants are not transferred across partition plates. In the winter, that means that the cold, dry outside air is preheated and humidified by the outgoing warm interior air. And in the summer, the warm, humid outside air is precooled and dehumidified by the outgoing air-conditioned interior air.



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



GREEN BUILDING TRENDS

High-performance, green-building standards seek to reduce energy use and increase ventilation to improve health, wellness, IAQ and indoor environmental quality (IEQ). Sustainable design initiatives like ASHRAE Standard 189.1, LEED, 2030 Challenge, Living Building Challenge and WELL Building Standard have grown in popularity among architects, engineers, contractors and building owners alike.

RenewAire ventilation technologies create healthier and more comfortable indoor environments, while optimizing energy efficiency. This is done by reusing otherwise-wasted total energy from the exhaust air to condition incoming outdoor air. The results are exceptional IAQ, IEQ, energy reductions and cost savings.



WHY RENEWAIRE IS PREFERRED



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



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
- ◆ Superior product quality results in paramount reliability and longevity



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
 - ◆ AHRI
 - ◆ HVI





ENERGY RECOVERY VENTILATOR
EC MOTOR



INDOOR UNIT



Note: There are multiple control options designed to address individual climate conditions. Please consult your local installer for the best installation controls for your climate.

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 or hard wired to junction box (H)
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: 35 lbs.

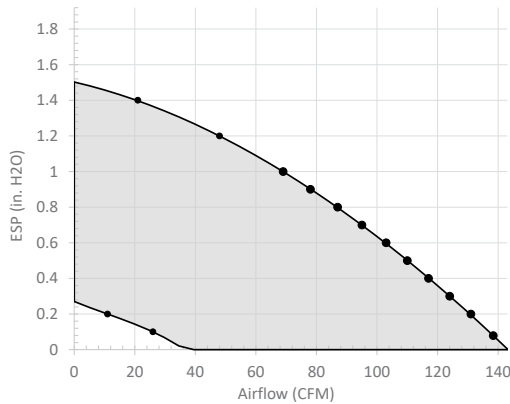
Max. Shipping Dimensions & Weight (in carton):
31 1/4" L x 22 3/8" W x 14 3/8" H
41 lbs.

Units Per Pallet: 10

Motor(s):
Qty. 2, 120V EC motorized impellers

Accessories:
Backdraft damper: 6", 8"
Automatic balancing damper: 4", 5", 6"
Motorized dampers: 6", 8"
Concentric vent: 6" (CV6-110)
Louvered wall vent 6": white, brown
Louvered wall vent 8": taupe vinyl, galvanized, paintable galvalneal
Louvered wall vent with 8" round duct connection: 12" W x 8" H
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)
BACnet fan control: wall mount (BACNETFC-W)
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 (1–4 kW); designed for indoor ductwork installation only

EC MOTOR OPERATING RANGE AND CORE PERFORMANCE



● = Actual tested sample points

| = Operating curves, airflow is held constant as static pressure varies

Factory settings

1. High speed set to top curve
2. Low speed set to ~90CFM at 0.4 in. w.g. ESP

Airflow (CFM)	External Static Pressure (Inches Water Column)	Unit Power Consumption (Watts)	Sensible EFF%	Total EFF% Winter/Summer
Max. Speed				
138	0.10	135	62	54/36
131	0.20	134	64	55/38
125	0.30	133	65	57/40
117	0.40	132	66	59/42
110	0.50	131	68	60/44
102	0.60	129	69	62/46
95	0.70	126	71	64/48
87	0.80	123	72	66/51
78	0.90	119	74	68/53
68	1.00	114	76	70/56
49	1.20	102	79	75/61
21	1.40	64	85	81/69
Min. Speed				
26	0.10	11	84	80/68
11	0.20	9	87	83/72

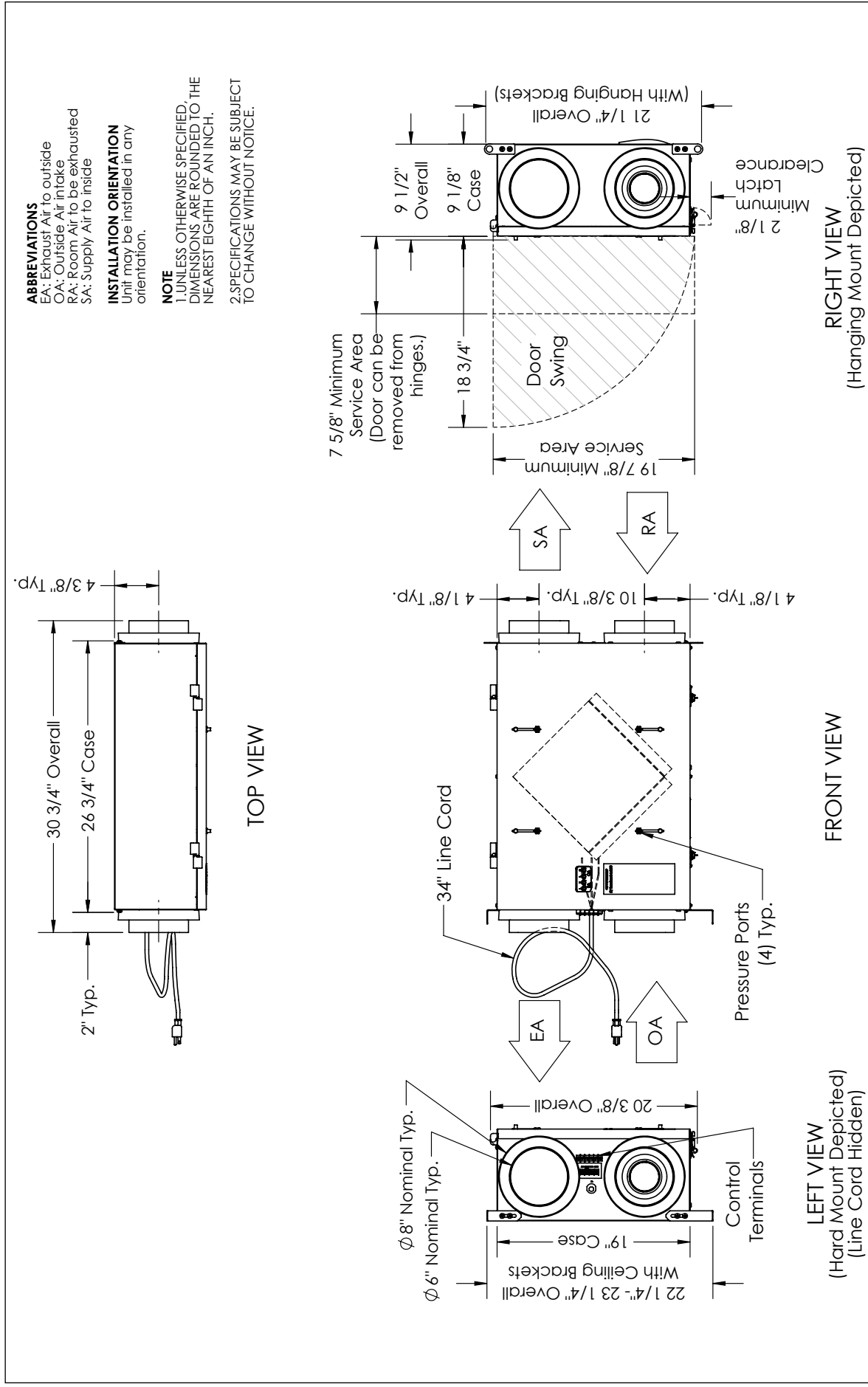
Notes:

1. Watts is for the entire unit.
2. Airflow performance includes effect of clean, standard filter supplied with unit.
3. Refer to CORES for specific operating point electrical data.
4. These are core-only ratings and are not HVI certified. Total EFF% calculated at 35/33wb OA and 70/58wb RA (winter) and 95/78wb OA and 75/63wb RA (summer). HVI ratings apply to complete units only. This unit is HVI certified. See HVI certified ratings on pg. 46 of Single/Multi-Family Catalog and at hvi.org.

ELECTRICAL DATA

Watts	Volts	Hz	Phase	FLA per motor	Minimum Circuit Amps	Max Overcurrent Protection Device
53	120	60	1	0.85	15	15

SL75 ENERGY RECOVERY VENTILATOR EC MOTOR



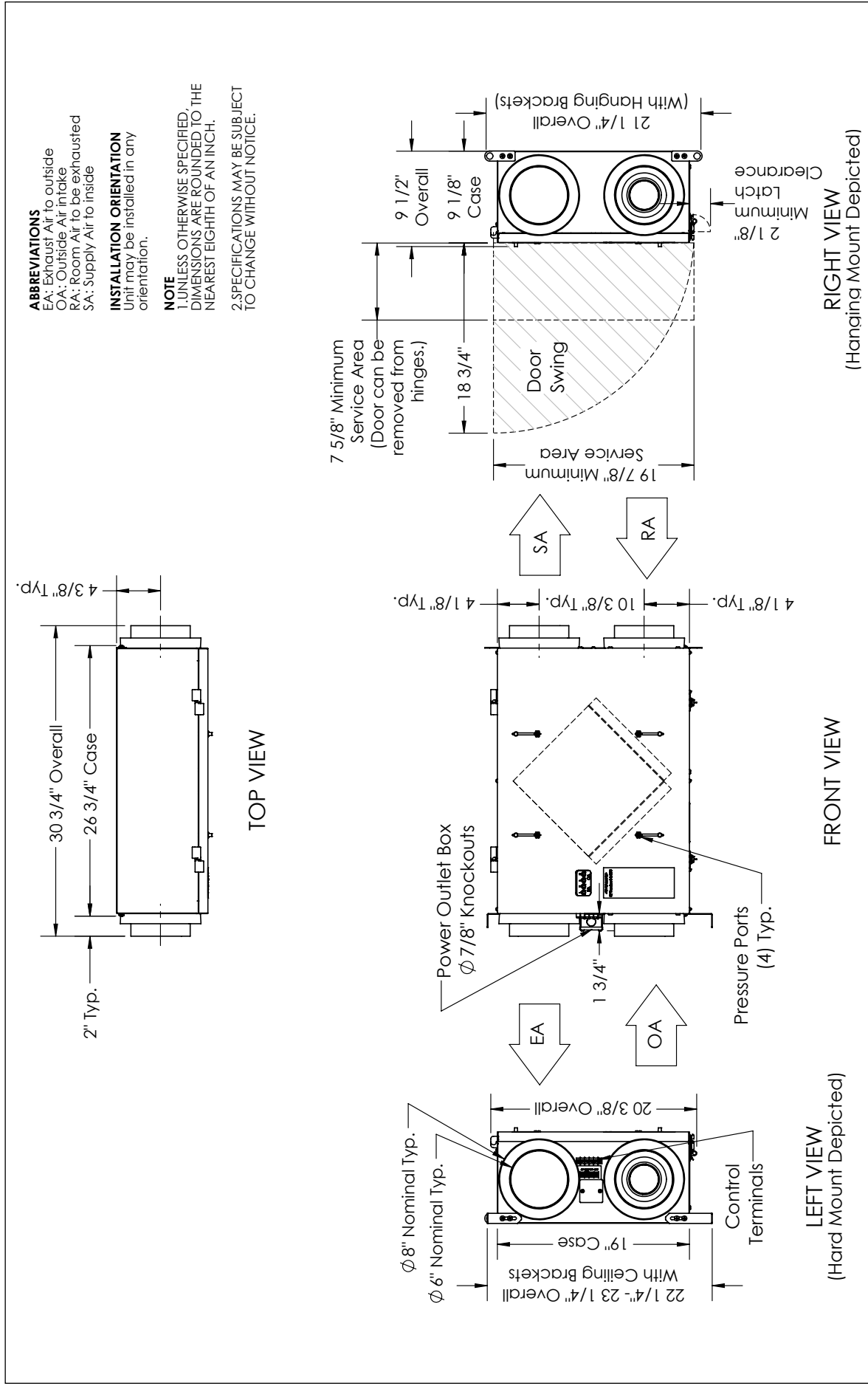
UNIT MOUNTING & APPLICATION
Can be mounted in any orientation. RA/EA airstream can be switched with OA/SA airstream.



AIRFLOW ORIENTATION
Available as shown in dimension drawing.



SL75H ENERGY RECOVERY VENTILATOR EC MOTOR



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



AIRFLOW ORIENTATION
Available as shown in dimension drawing.





ENERGY RECOVERY VENTILATOR
EC MOTOR



INDOOR UNIT



**AWARD WINNING
EV PREMIUM SH**

TecHome Builder's 2023 Brilliance Award

Note: There are multiple control options designed to address individual climate conditions. Please consult your local installer for the best installation controls for your climate.

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 or hard wired to junction box (H)
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.

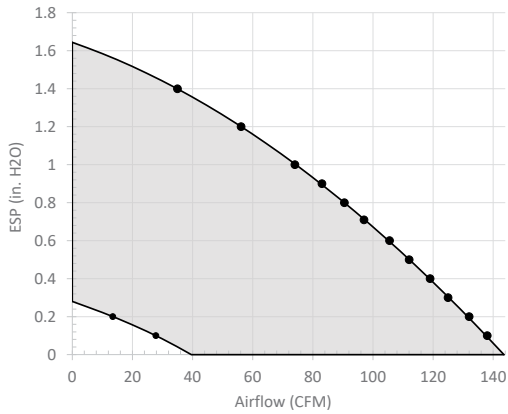
Max. Shipping Dimensions & Weight (in carton):
30" L x 22" W x 15" H
38 lbs.

Units Per Pallet: 10

Motor(s):
Qty. 2, 120V EC motorized impellers

Accessories:
Backdraft damper: 6", 8"
Automatic balancing damper: 4", 5", 6"
Motorized Dampers: 6", 8"
Concentric Vent: 6" (CV6-110)
Louvered wall vent 6": white, brown
Louvered wall vent 8": taupe vinyl, galvanized, paintable galvanized
Louvered wall vent with 8" round duct connection: 12" W x 8" H
Hooded wall vent 8": galvanized, paintable galvanized
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
BACnet fan control: wall mount (BACNETFC-W)
MERV 13 filter: OA airstream (shipped loose)
Electric duct heater: RH series (1–4 kW); designed for indoor ductwork installation only

EC MOTOR OPERATING RANGE AND CORE PERFORMANCE



● = Actual tested sample points
| = Operating curves, airflow is held constant as static pressure varies

Factory settings
1. High speed set to top curve
2. Low speed set to ~90CFM at 0.4 in. w.g. ESP

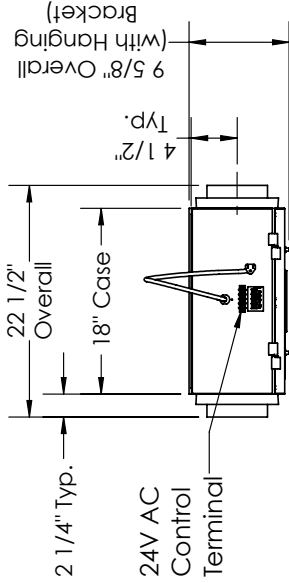
Airflow (CFM)	External Static Pressure (Inches Water Column)	Unit Power Consumption (Watts)	Sensible EFF%	Total EFF% Winter/Summer
Max. Speed				
138	0.10	137	62	54/36
131	0.20	136	64	55/38
125	0.30	134	65	57/40
119	0.40	133	66	58/41
112	0.50	133	67	60/43
106	0.60	130	68	61/45
97	0.70	128	70	63/48
91	0.80	124	71	65/49
83	0.90	121	73	67/52
74	1.00	116	75	69/54
56	1.20	98	78	73/59
35	1.40	85	82	78/65
Min. Speed				
28	0.10	13	83	79/67
13	0.20	12	86	83/71

Notes:
1. Watts is for the entire unit.
2. Airflow performance includes effect of clean, standard filter supplied with unit.
3. Refer to CORES for specific operating point electrical data.
4. These are core-only ratings and are not HVI certified. Total EFF% calculated at 35/33wb OA and 70/58wb RA (winter) and 95/78wb OA and 75/63wb RA (summer). HVI ratings apply to complete units only. This unit is HVI certified. See HVI certified ratings on pg. 46 of Single/Multi-Family Catalog and at hvi.org.

ELECTRICAL DATA

Watts	Volts	Hz	Phase	FLA per motor	Minimum Circuit Amps	Max Overcurrent Protection Device
53	120	60	1	0.85	15	15

EV PREMIUM S ENERGY RECOVERY VENTILATOR EC MOTOR

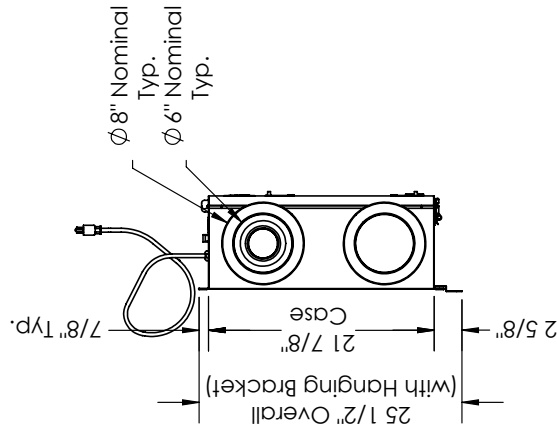


TOP VIEW

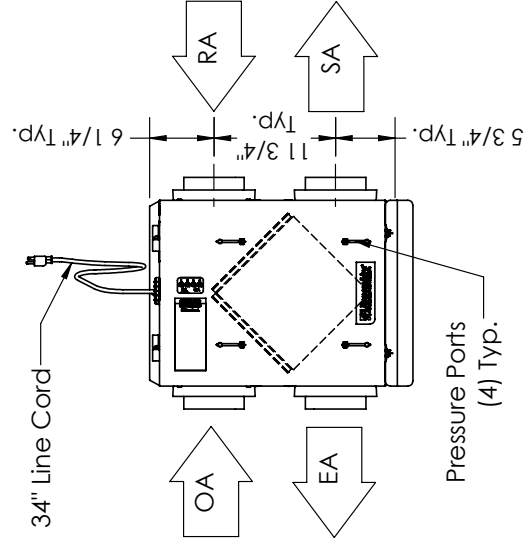
ABBREVIATIONS
 EA: Exhaust Air to outside
 OA: Outside Air Intake
 RA: Room Air to be exhausted
 SA: Supply Air to inside

INSTALLATION ORIENTATION
 Unit may be installed in any orientation.

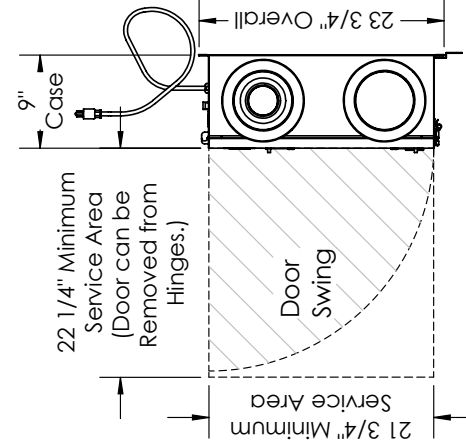
NOTE
 1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
 2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.



LEFT VIEW



FRONT VIEW



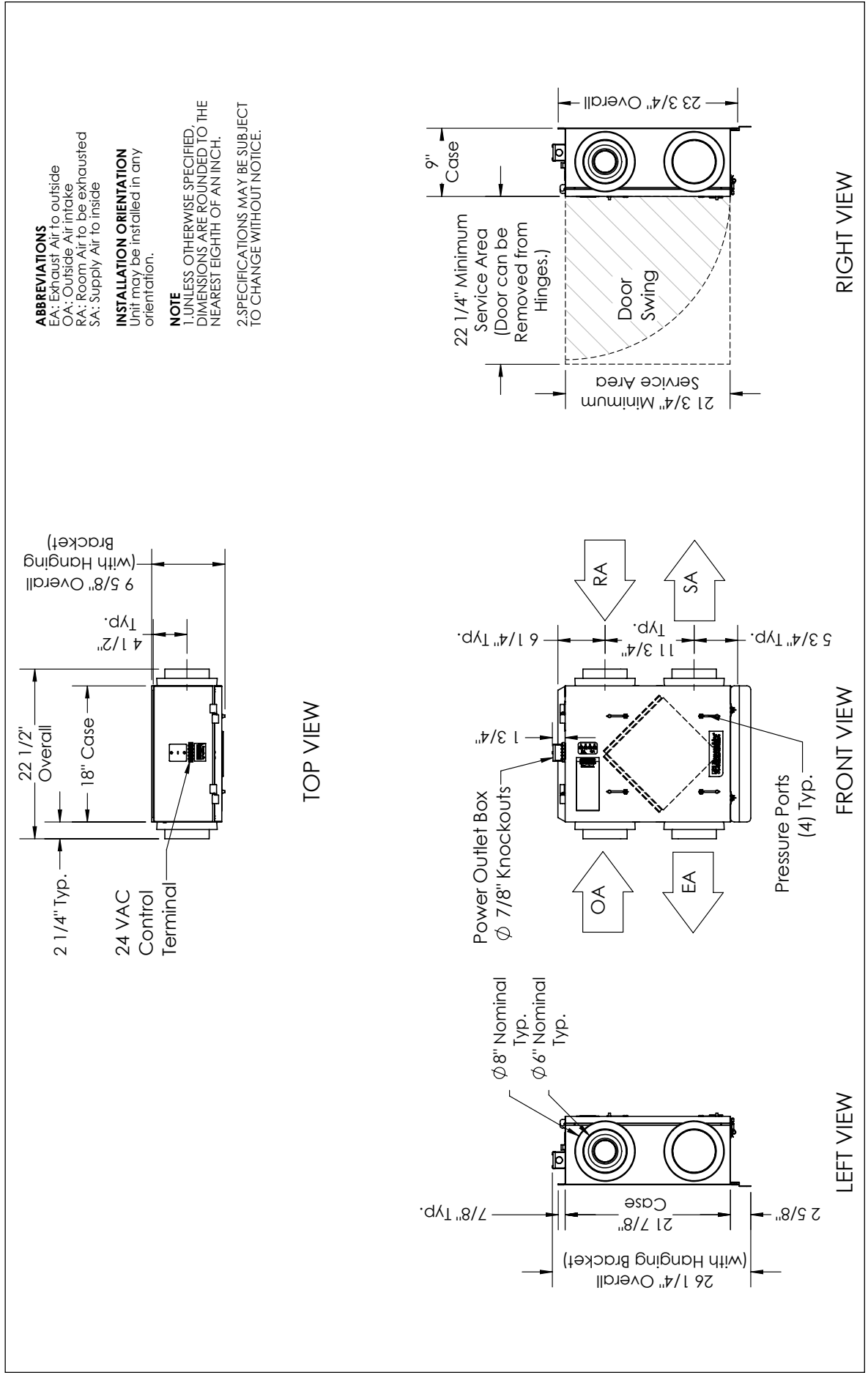
RIGHT VIEW

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/SA airstream.

EV PREMIUM SH ENERGY RECOVERY VENTILATOR EC MOTOR



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



AIRFLOW ORIENTATION
Available as shown in dimension drawing.

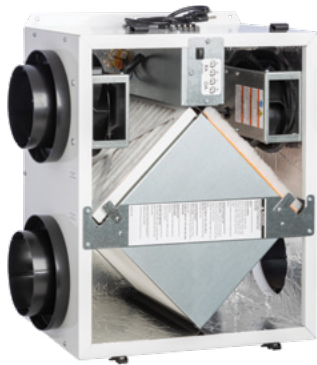




ENERGY RECOVERY VENTILATOR
EC MOTOR



INDOOR UNIT



AWARD WINNING
EV PREMIUM MH

TecHome Builder's 2023 Brilliance Award

Note: There are multiple control options designed to address individual climate conditions. Please consult your local installer for the best installation controls for your climate.

SPECIFICATIONS

Ventilation Type:
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 or hard wired to junction box (H)
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.

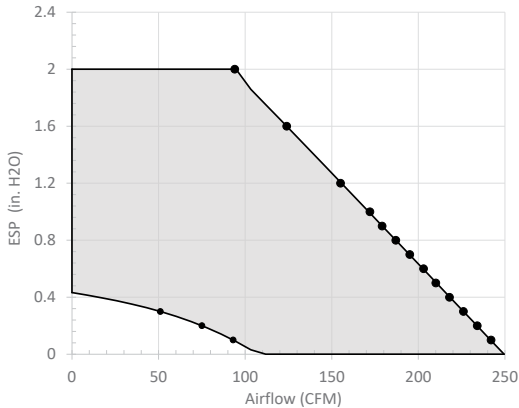
Max. Shipping Dimensions & Weight (in carton):
32" L x 22" W x 18" H
48 lbs.

Units Per Pallet: 8

Motor(s):
Qty. 2, 120V EC motorized impellers

Accessories:
Backdraft damper: 6", 8"
Automatic balancing damper: 4", 5", 6"
Motorized Dampers: 6", 8"
Concentric Vent: 6" (CV6-110)
Louvered wall vent 6": white, brown
Louvered wall vent 8": taupe vinyl, galvanized, paintable galvanized
Louvered wall vent with 8" round duct connection: 12" W x 8" H
Hooded wall vent 8": galvanized, paintable galvanized
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.
BACnet fan control: wall mount (BACNETFC-W)
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 AND CORE PERFORMANCE



● = Actual tested sample points
| = Operating curves, airflow is held constant as static pressure varies

Factory settings
1. High speed set to top curve
2. Low speed set to ~90CFM at 0.4 in. w.g. ESP

Airflow (CFM)	External Static Pressure (Inches Water Column)	Unit Power Consumption (Watts)	Sensible EFF%	Total EFF% Winter/Summer
Max. Speed				
242	0.10	191	57	47/28
233	0.20	190	58	48/29
227	0.30	189	59	49/31
218	0.40	189	60	50/32
210	0.50	191	61	52/34
203	0.60	192	62	53/35
195	0.70	189	63	54/37
186	0.80	191	64	56/38
180	0.90	189	65	57/40
172	1.00	190	66	58/42
155	1.20	191	68	61/45
124	1.60	190	72	66/51
92	2.00	190	77	71/57
Min. Speed				
93	0.10	74	76	71/57
75	0.20	68	79	74/60
51	0.30	58	82	78/65

AUGMENTED REALITY (AR)

Scan QR code to see life size version of EV Premium M, or view here: <https://QR.Marketscale.com/EVPremiumM>

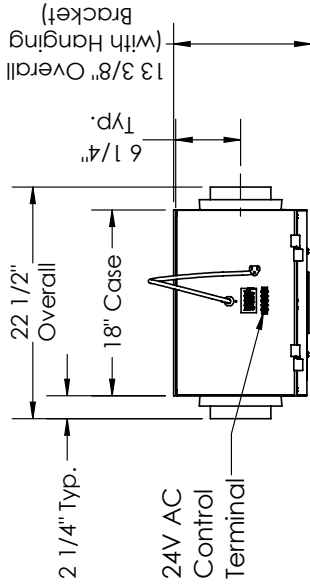


Notes:
1. Watts is for the entire unit.
2. Airflow performance includes effect of clean, standard filter supplied with unit.
3. Refer to CORES for specific operating point electrical data.
4. These are core-only ratings and are not HVI certified. Total EFF% calculated at 35/33wb OA and 70/58wb RA (winter) and 95/78wb OA and 75/63wb RA (summer). HVI ratings apply to complete units only. This unit is HVI certified. See HVI certified ratings on pg. 46 of Single/Multi-Family Catalog and at hvi.org.

ELECTRICAL DATA

Watts	Volts	Hz	Phase	FLA per motor	Minimum Circuit Amps	Max Overcurrent Protection Device
85	120	60	1	1.22	15	15

EV PREMIUM M ENERGY RECOVERY VENTILATOR EC MOTOR

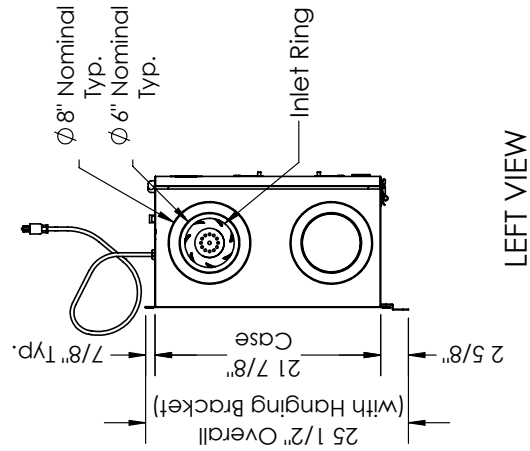


TOP VIEW

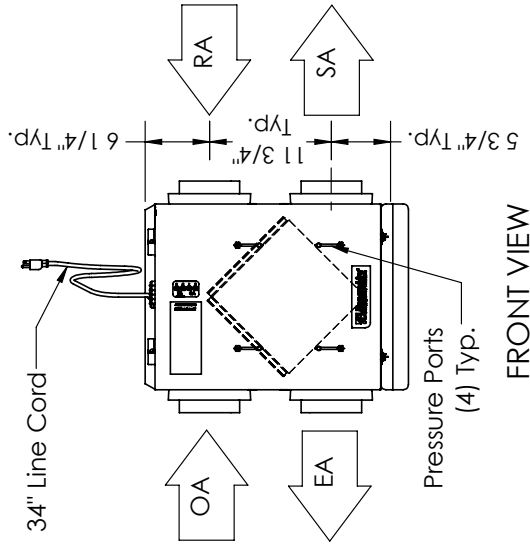
ABBREVIATIONS
 EA: Exhaust Air to outside
 OA: Outside Air Intake
 RA: Room Air to be exhausted
 SA: Supply Air to inside

INSTALLATION ORIENTATION
 Unit may be installed in any orientation.

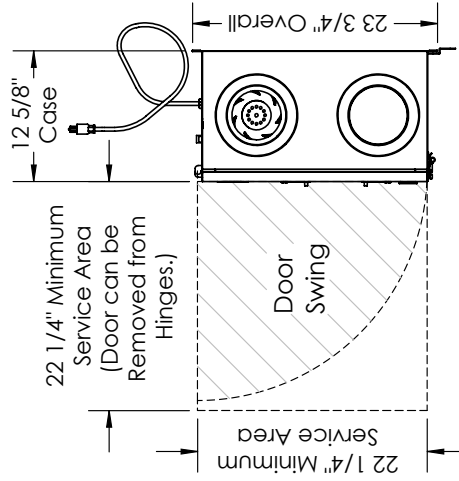
NOTE
 1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
 2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.



LEFT VIEW



FRONT VIEW



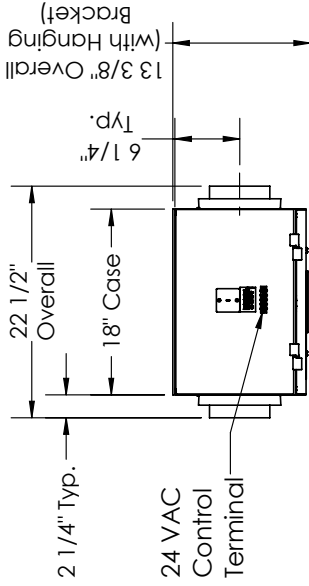
RIGHT VIEW

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/SA airstream.

EV PREMIUM MH ENERGY RECOVERY VENTILATOR EC MOTOR

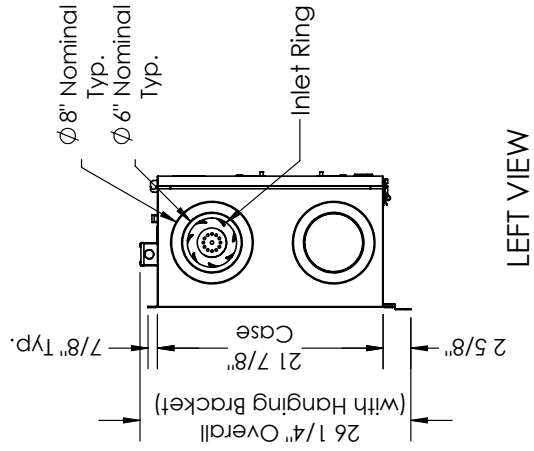


TOP VIEW

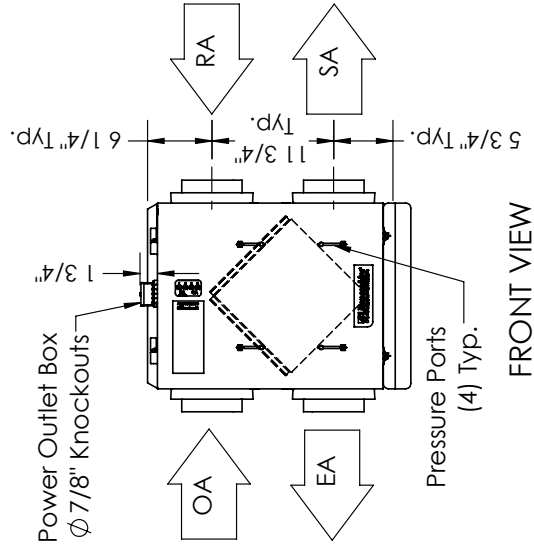
ABBREVIATIONS
 EA: Exhaust Air to outside
 OA: Outside Air intake
 RA: Room Air to be exhausted
 SA: Supply Air to inside

INSTALLATION ORIENTATION
 Unit may be installed in any orientation.

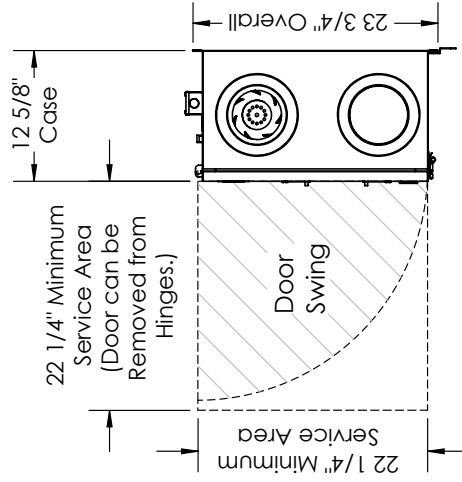
NOTE
 1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
 2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.



LEFT VIEW



FRONT VIEW



RIGHT VIEW

AIRFLOW ORIENTATION
 Available as shown in dimension drawing.



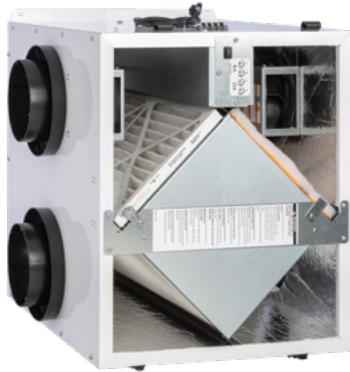
UNIT MOUNTING & APPLICATION
 Can be mounted in any orientation. RA/EA airstream can be switched with OA/SA airstream.



ENERGY RECOVERY VENTILATOR
EC MOTOR



INDOOR UNIT



AWARD WINNING
EV PREMIUM LH

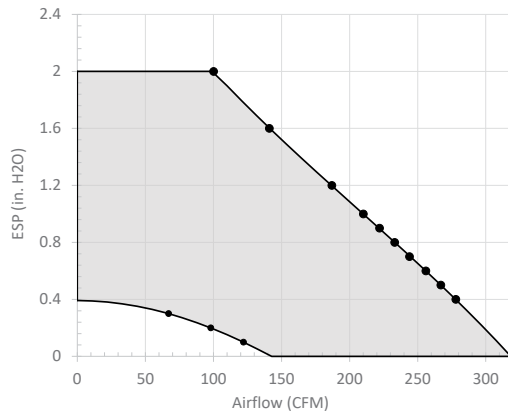
TecHome Builder's 2023 Brilliance Award

Note: There are multiple control options designed to address individual climate conditions. Please consult your local installer for the best installation controls for your climate.

SPECIFICATIONS

Ventilation Type: Static plate, heat and humidity transfer	Motor(s): Qty. 2, 120V EC motorized impellers
Typical Airflow Range: 30–280 CFM	Accessories: Backdraft damper: 6", 8" Automatic balancing damper: 4", 5", 6" Motorized Dampers: 6", 8" Concentric Vent: 6" (CV6-110) Louvered wall vent 6": white, brown Louvered wall vent 8": taupe vinyl, galvanized, paintable galvaneal Louvered wall vent with 8" round duct connection: 12" W x 8" H Hooded wall vent 8": galvanized, paintable galvaneal 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. BACnet fan control: wall mount (BACNETFC-W) MERV 13 filter: OA airstream (shipped loose) Electric duct heater: RH series (1–8 kW); designed for indoor ductwork installation only
Unit is HVI Tested/Certified per CSA C439 Protocol: Using one L-100-G5 Core	
Standard Features: White painted cabinet Line-cord power supply or hard wired to junction box (H) 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.	
Units Per Pallet: 4	

EC MOTOR OPERATING RANGE AND CORE PERFORMANCE



● = Actual tested sample points
| = Operating curves, airflow is held constant as static pressure varies

Factory settings
1. High speed set to top curve
2. Low speed set to ~90CFM at 0.4 in. w.g. ESP

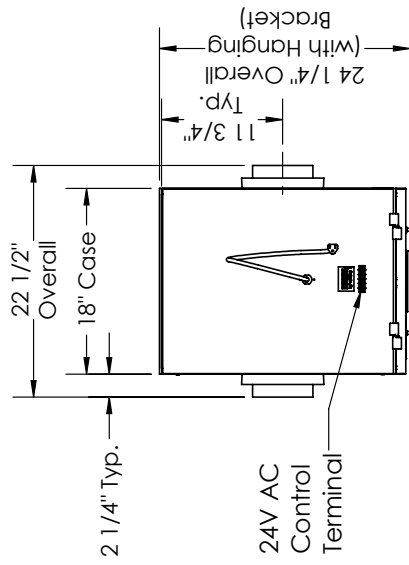
Airflow (CFM)	External Static Pressure (Inches Water Column)	Unit Power Consumption (Watts)	Sensible EFF%	Total EFF% Winter/Summer
Max. Speed				
278	0.40	183	71	64/49
267	0.50	185	72	65/50
256	0.60	184	73	66/51
244	0.70	184	73	67/52
233	0.80	184	74	68/53
222	0.90	184	75	69/54
210	1.00	184	76	70/56
187	1.20	185	77	72/58
141	1.60	183	80	75/62
100	2.00	185	82	78/66
Min. Speed				
122	0.10	80	81	77/64
98	0.20	79	83	78/66
67	0.30	70	85	81/69

Notes:
1. Watts is for the entire unit.
2. Airflow performance includes effect of clean, standard filter supplied with unit.
3. Refer to CORES for specific operating point electrical data.
4. These are core-only ratings and are not HVI certified. Total EFF% calculated at 35/33wb OA and 70/58wb RA (winter) and 95/78wb OA and 75/63wb RA (summer). HVI ratings apply to complete units only. This unit is HVI certified. See HVI certified ratings on pg. 47 of Single/Multi-Family Catalog and at hvi.org.

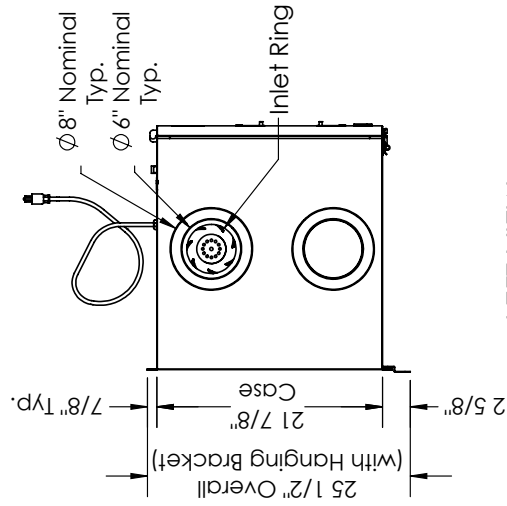
ELECTRICAL DATA

Watts	Volts	Hz	Phase	FLA per motor	Minimum Circuit Amps	Max Overcurrent Protection Device
85	120	60	1	1.22	15	15

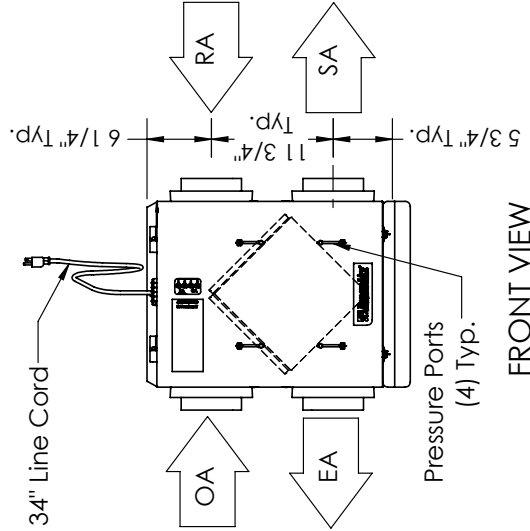
EV PREMIUM L ENERGY RECOVERY VENTILATOR EC MOTOR



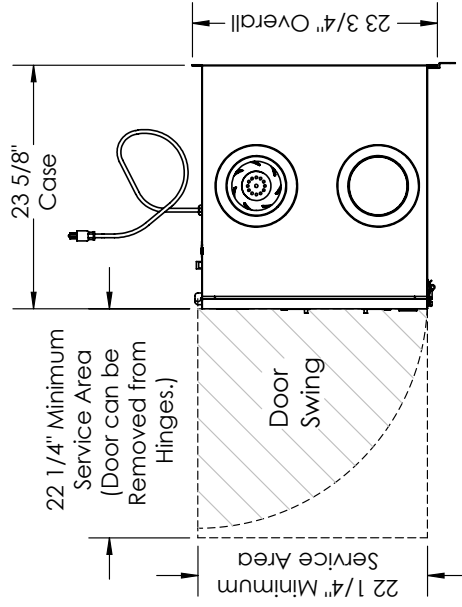
TOP VIEW



LEFT VIEW



FRONT VIEW



RIGHT VIEW

ABBREVIATIONS

- EA: Exhaust Air to outside
- OA: Outside Air Intake
- RA: Room Air to be exhausted
- SA: Supply Air to inside

INSTALLATION ORIENTATION

Unit may be installed in any orientation.

NOTE

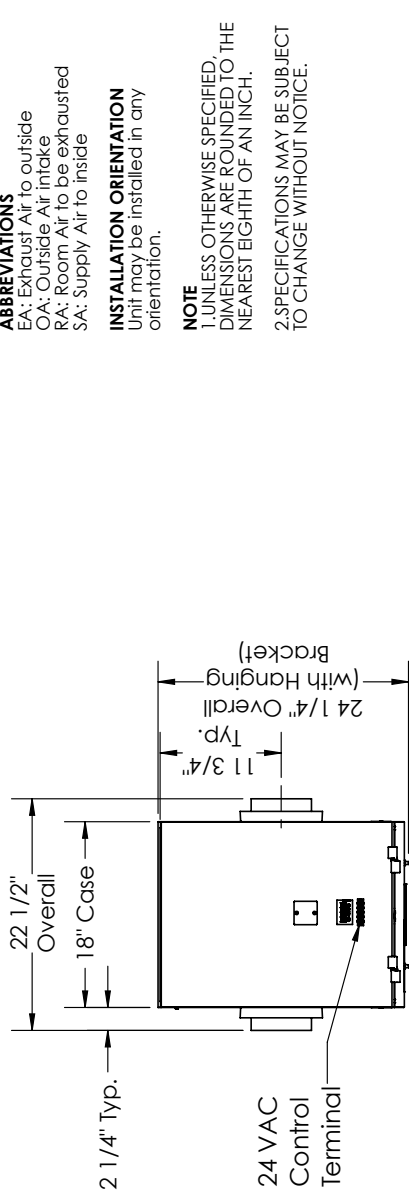
1. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.
2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.

AIRFLOW ORIENTATION
Available as shown in dimension drawing.

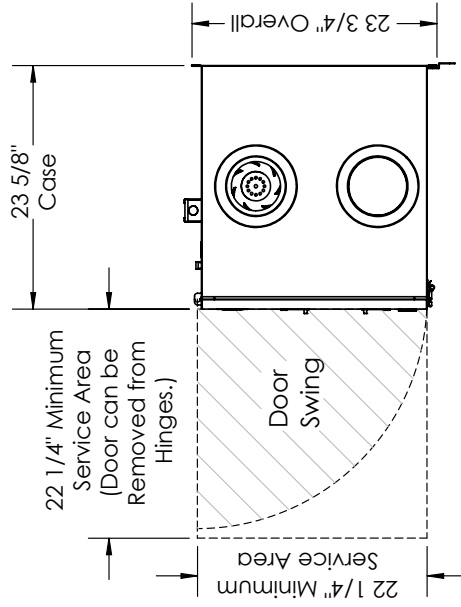


UNIT MOUNTING & APPLICATION
Can be mounted in any orientation. RA/EA airstream can be switched with OA/SA airstream.

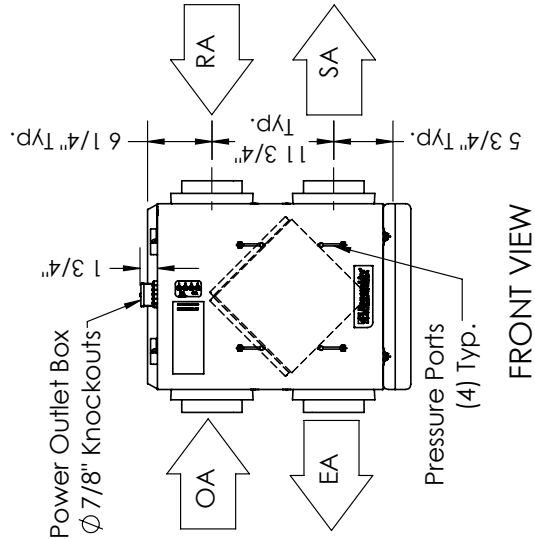
EV PREMIUM LH ENERGY RECOVERY VENTILATOR EC MOTOR



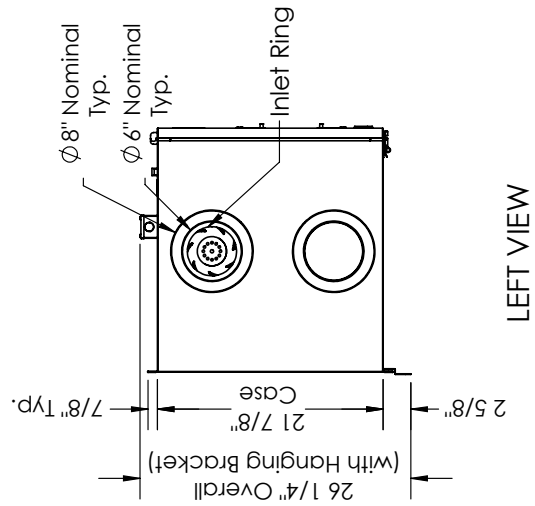
TOP VIEW



RIGHT VIEW



FRONT VIEW



LEFT VIEW

ABBREVIATIONS

- EA: Exhaust Air to outside
- OA: Outside Air intake
- RA: Room Air to be exhausted
- SA: Supply 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.



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

AIRFLOW ORIENTATION
Available as shown in dimension drawing.





NEW! INDOOR UNIT



Note: There are multiple control options designed to address individual climate conditions. Please consult your local installer for the best installation controls for your climate.

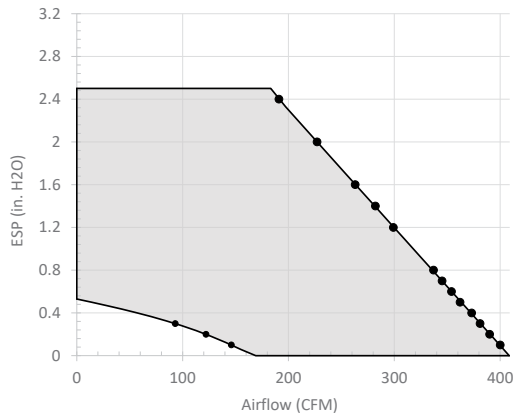
**ENERGY RECOVERY VENTILATOR
EC MOTOR**



SPECIFICATIONS

Ventilation Type: Static plate, heat and humidity transfer	Units Per Pallet: 4
Typical Airflow Range: 100–390 CFM	Motor(s): Qty. 2, 120V EC motorized impellers
Unit is HVI Tested/Certified per CSA C439 Protocol: Using one L-100-G5 Core	Accessories: Backdraft damper: 8" Automatic balancing damper: 4", 5", 6" Motorized Dampers: 8" Louvered wall vent 8": taupe vinyl, galvanized, paintable galvaneal Louvered wall vent with 8" round duct connection: 12" W x 8" H Hooded wall vent 8": galvanized, paintable galvaneal 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. BACnet fan control: wall mount (BACNETFC-W) MERV 13 filter: OA airstream (shipped loose) Electric duct heater: RH series (1–11.5 kW); designed for indoor ductwork installation only
Standard Features: White painted cabinet Line-cord power supply or hard wired to junction box (H) 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: 65 lbs.	
Max. Shipping Dimensions & Weight (in carton): 33" L x 24" W x 29" H 72 lbs.	

EC MOTOR OPERATING RANGE AND CORE PERFORMANCE



● = Actual tested sample points
| = Operating curves, airflow is held constant as static pressure varies

- Factory settings**
1. High speed set to top curve
 2. Low speed set to ~90CFM at 0.4 in. w.g. ESP

Airflow (CFM)	External Static Pressure (Inches Water Column)	Unit Power Consumption (Watts)	Sensible EFF%	Total EFF% Winter/Summer
Max. Speed				
400	0.10	339	64	55/38
390	0.20	338	64	56/39
381	0.30	340	65	57/40
373	0.40	337	65	57/40
362	0.50	337	66	58/41
354	0.60	337	66	59/42
345	0.70	337	67	59/43
337	0.80	336	68	60/44
318	1.00	337	69	61/46
299	1.20	336	70	63/47
282	1.40	336	71	64/49
263	1.60	344	72	66/51
227	2.00	349	74	68/54
191	2.40	359	77	71/57
Min. Speed				
146	0.10	41	80	75/62
122	0.20	37	81	77/64
93	0.30	32	83	79/66

- Notes:**
1. Watts is for the entire unit.
 2. Airflow performance includes effect of clean, standard filter supplied with unit.
 3. Refer to CORES for specific operating point electrical data.
 4. These are core-only ratings and are not HVI certified. Total EFF% calculated at 35/33wb OA and 70/58wb RA (winter) and 95/78wb OA and 75/63wb RA (summer). HVI ratings apply to complete units only. This unit is HVI certified. See HVI certified ratings on pg. 47 of Single/Multi-Family Catalog and at hvi.org.

AUGMENTED REALITY (AR)

Scan QR code to see life size version of EV Premium X, or view here: <https://QR.Marketscale.com/EVPremiumX>

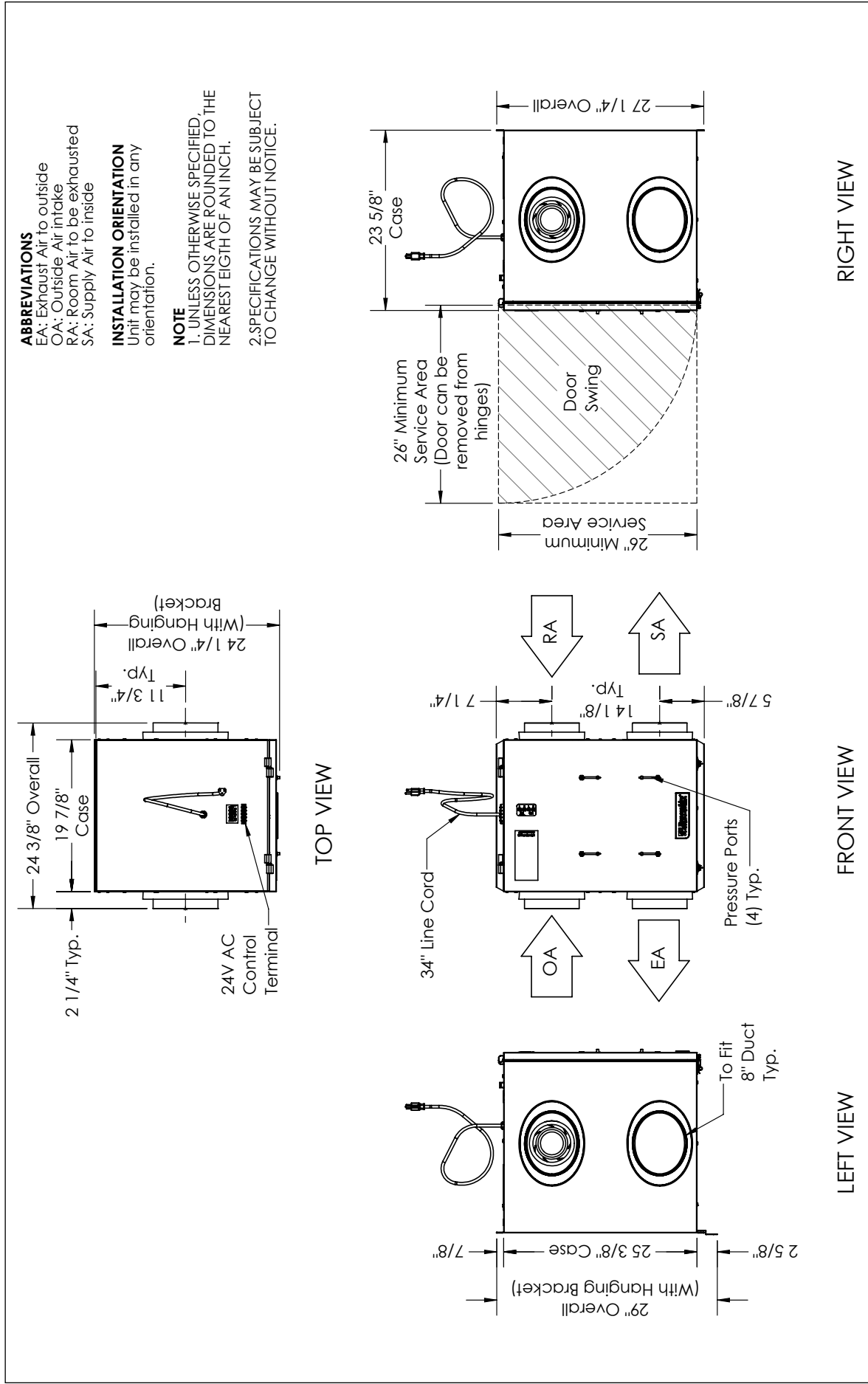


ELECTRICAL DATA

Watts	Volts	Hz	Phase	FLA per motor	Minimum Circuit Amps	Max Overcurrent Protection Device
220	120	60	1	2.7	15	15



EV PREMIUM X ENERGY RECOVERY VENTILATOR EC MOTOR



ABBREVIATIONS

- EA: Exhaust Air to outside
- OA: Outside Air intake
- RA: Room Air to be exhausted
- SA: Supply Air to inside

INSTALLATION ORIENTATION

Unit may be installed in any orientation.

NOTE

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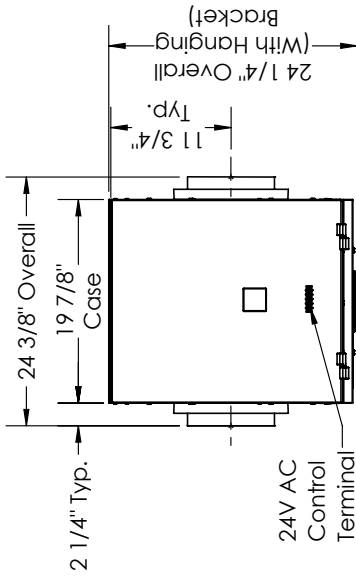
UNIT MOUNTING & APPLICATION
Can be mounted in any orientation. RA/EA airstream can be switched with OA/SA airstream.



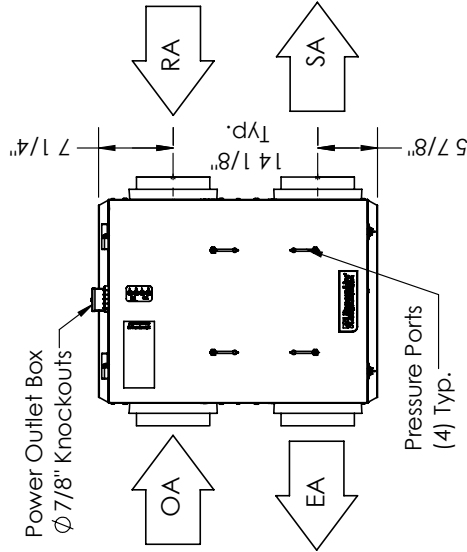
AIRFLOW ORIENTATION
Available as shown in dimension drawing.



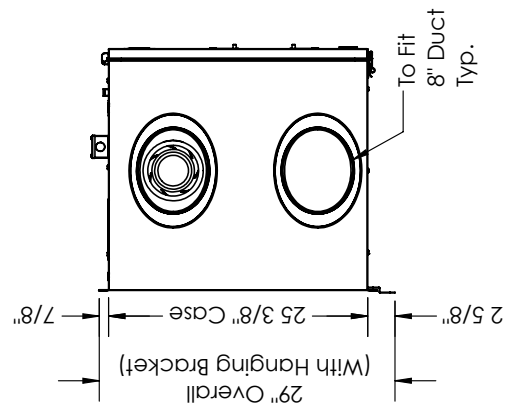
EV PREMIUM XH ENERGY RECOVERY VENTILATOR EC MOTOR



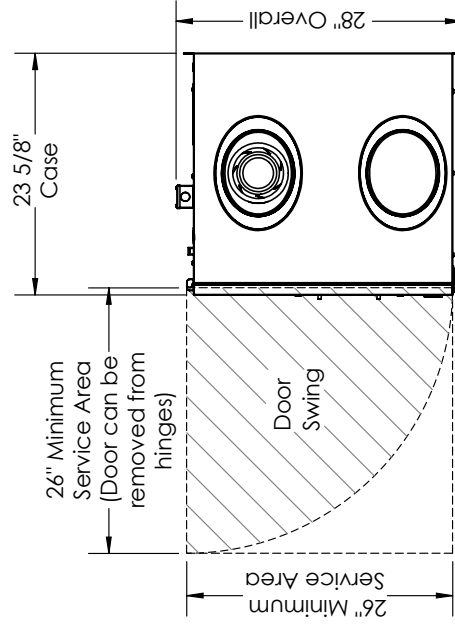
TOP VIEW



FRONT VIEW



LEFT VIEW



RIGHT VIEW

ABBREVIATIONS

- EA: Exhaust Air to outside
- OA: Outside Air intake
- RA: Room Air to be exhausted
- SA: Supply Air to inside

INSTALLATION ORIENTATION

Unit may be installed in any orientation.

NOTE

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AIRFLOW ORIENTATION
Available as shown in dimension drawing.



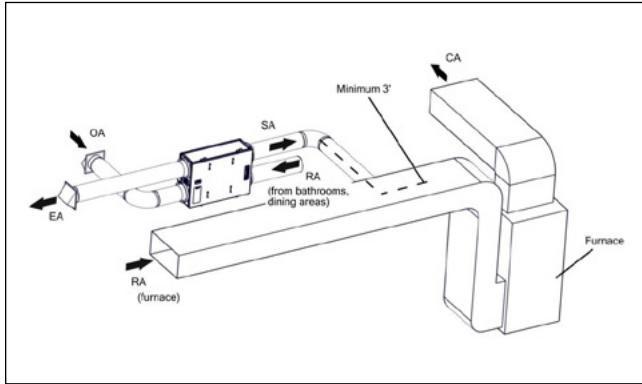
UNIT MOUNTING & APPLICATION
Can be mounted in any orientation. RA/EA airstream can be switched with OA/SA airstream.

APPLICATIONS

COMMON INSTALLATION APPROACHES

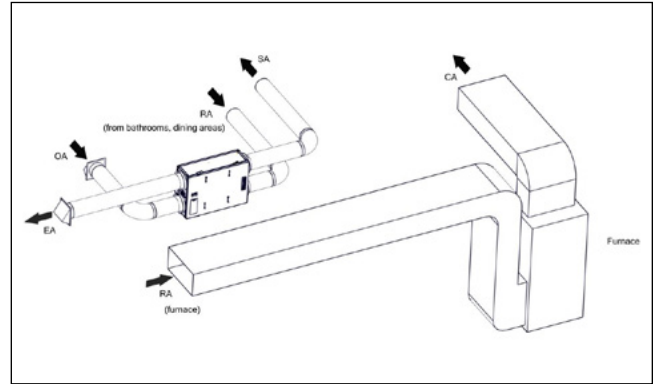
SL AND EV PREMIUM SERIES

SEPARATE RETURN AIR PICK-UP SUPPLY AIR TO FURNACE RETURN AIR TRUNK*



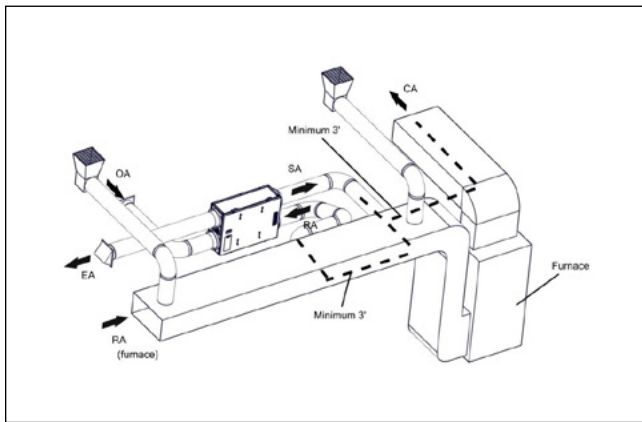
Note: ERV blower may be operated separate from furnace blower.

SEPARATE RETURN AIR AND SUPPLY AIR*



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

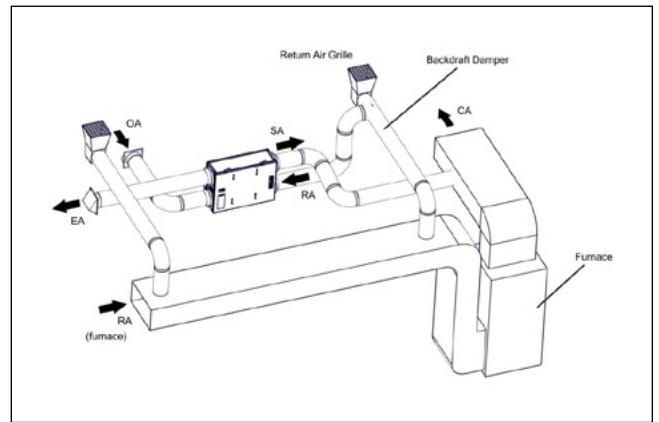
FURNACE RETURN AIR BACK INTO RETURN AIR*



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.

Conditioned Air (CA); Exhaust Air (EA); Outside Air (OA); Room Air (RA); Supply Air (SA)

FURNACE RETURN AIR BACK INTO SUPPLY AIR*



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

*Installation orientation may result in logo being displayed upside down. This does not affect performance and is an acceptable installation orientation.

CONTROL STRATEGIES

See individual submittal pages for compatibility by model.

CONTINUOUS VENTILATION

Note: There are multiple control options designed to address individual climate conditions. Please consult your local installer for the best installation controls for your climate.

ONE-SPEED

Standalone

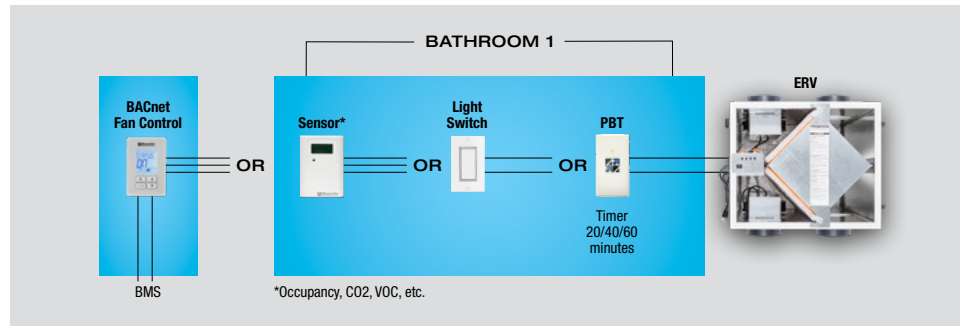
- ♦ No additional controls required
- ♦ Models run at the set low-speed when powered



TWO-SPEED

Low Speed with a Single On Demand Boost Mode Activation Location (e.g. bathroom)

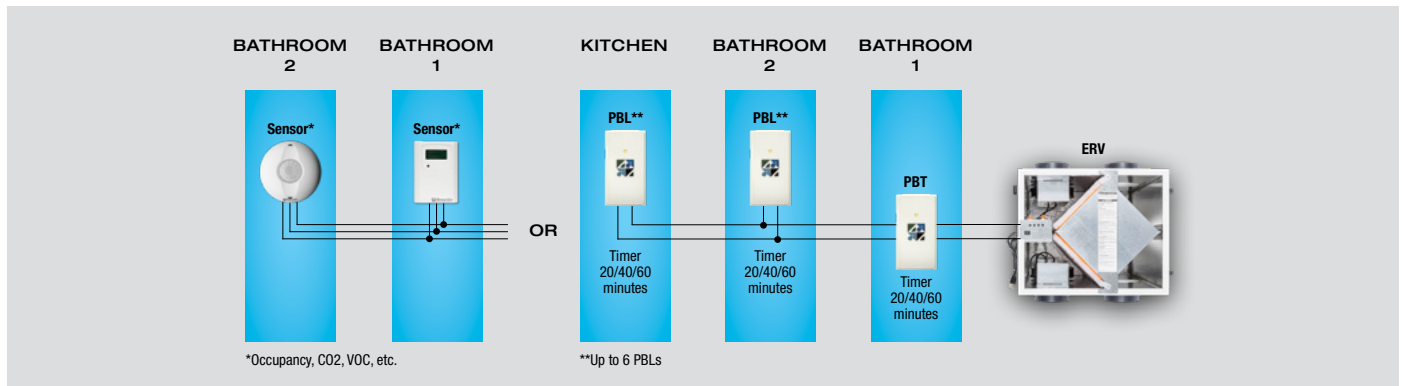
- ♦ Models run at the set low-speed when powered and operate at set high-speed only when activated by signal



TWO-SPEED

Low Speed with Multiple On Demand Boost Mode Activation Locations (e.g. bathrooms, kitchen, etc.)

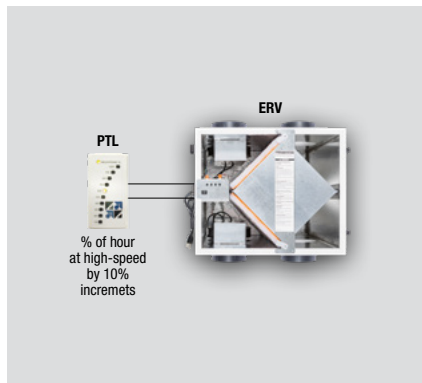
- ♦ Models run at the set low-speed when powered and operate at set high-speed when activated by signal



TWO-SPEED

Low Speed with Set % of Hour Boost Mode Activation

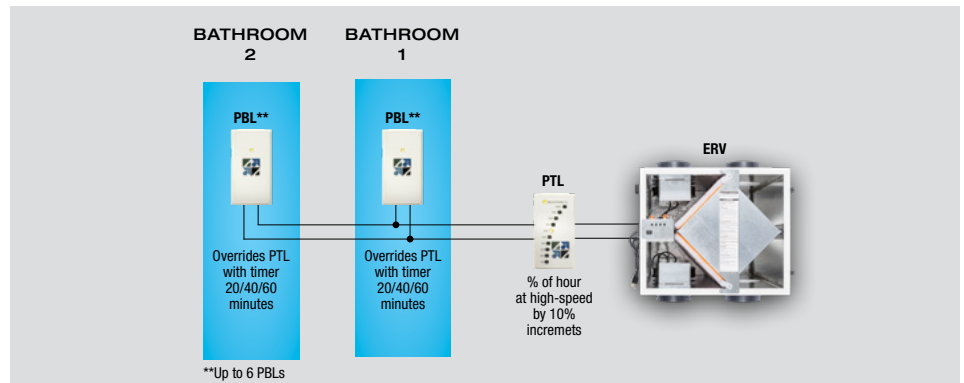
- ♦ Models run at the set low-speed when powered and operate at high-speed only when activated by PTL for set % of each hour



TWO-SPEED

Low Speed with Set % of Hour Boost Mode Activation and Additional On Demand Boost Mode Activation Locations (e.g. bathrooms, kitchen, etc.)

- ♦ Models run at the set low-speed when powered and operate at high-speed only when activated by PTL for set % of each hour or PBL timer-based override



CONTROL STRATEGIES

See individual submittal pages for compatibility by model.

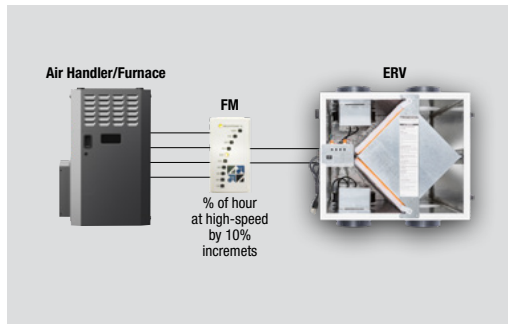
INTERMITTENT VENTILATION

Note: There are multiple control options designed to address individual climate conditions. Please consult your local installer for the best installation controls for your climate.

ONE-SPEED

Furnace Interlock

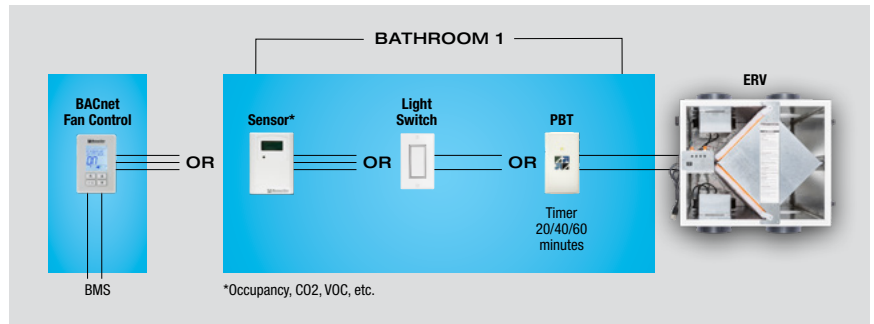
- Low-Speed set to 0, and High-Speed set for desired CFM
- Models are off when powered and operate at High-Speed only when activated by signal, which also turns furnace blower on



ONE-SPEED

Single On Demand Activation Location (e.g. bathroom)

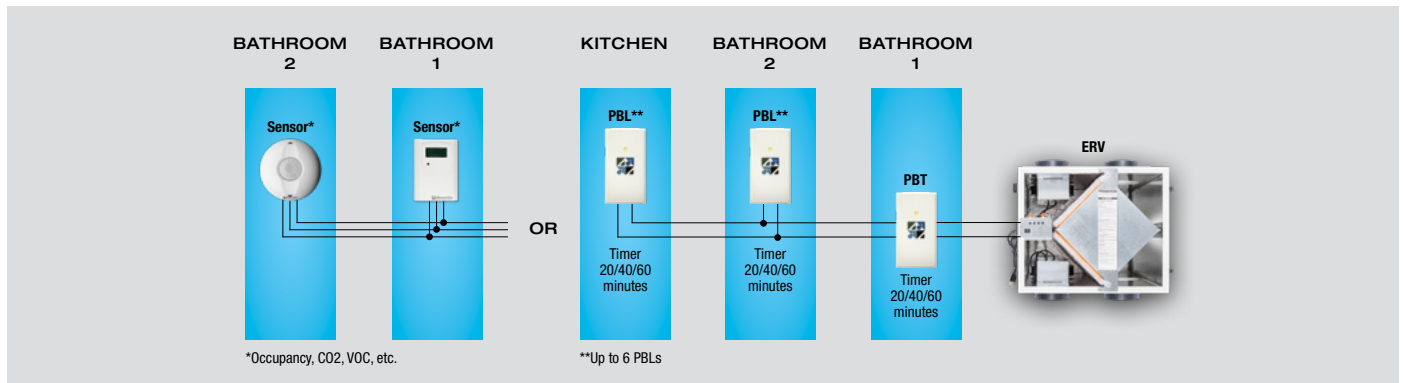
- Low-Speed set to 0, and High-Speed set for desired CFM
- Models are off when powered and operate at High-Speed only when activated by signal



ONE-SPEED

Multiple On Demand Activation Locations (e.g. bathrooms, kitchen, etc.)

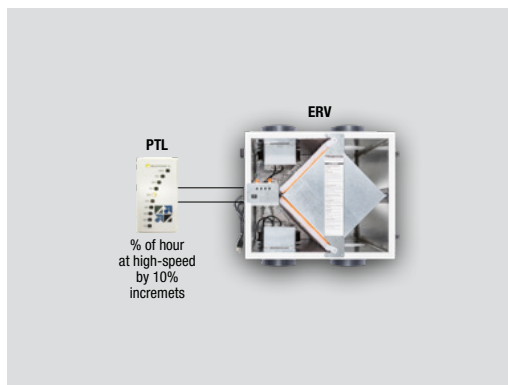
- Low-Speed set to 0, and High-Speed set for desired CFM
- Models are off when powered and operate at High-Speed only when activated by signal



ONE-SPEED

Set % of Hour Activation

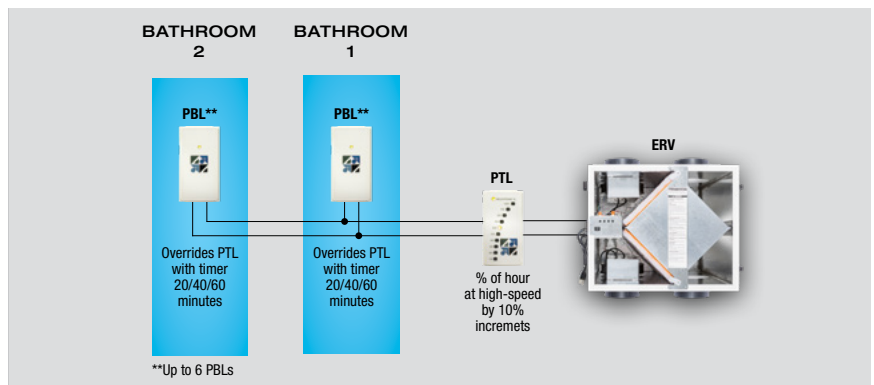
- Low-Speed set to 0, and High-Speed set for desired CFM
- Models are off when powered and operate at High-Speed only when activated by PTL for set % of each hour



ONE-SPEED

Set % of Hour Activation and Additional On Demand Activation Locations (e.g. bathrooms, kitchen, etc.)

- Low-Speed set to 0, and High-Speed set for desired CFM
- Models are off when powered and operate at High-Speed only when activated by PTL for set % of each hour or PBL timer-based override



ACCESSORIES

See controls accessory table on next page or individual submittal pages for compatibility by model.

CONTROLS

PERCENTAGE TIMER (PTL)

Primary control

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



PTL Control

PERCENTAGE TIMER WITH FURNACE INTERLOCK (FM)

Primary control

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



FM Control

PUSH-BUTTON BOOST TIMER (PBT)

Primary control

- Push-button control sends unit to boost mode from bathrooms or other intermittent exhaust locations
- Push once for 20 minutes, twice for 40 minutes, and 3 times for 60 minutes of run-time.
- Two-wire, low-voltage connection



PBT Control

PUSH-BUTTON POINT OF USE TIMER (PBL)

Secondary control used in combination with PTL or PBT control

- Push-button control turns on unit from bathrooms or other intermittent exhaust locations
- Push once for 20 minutes, twice for 40 minutes, and 3 times for 60 minutes of run-time.
- Two-wire, low-voltage connection to PTL or PBT control



PBL Control — requires PTL or PBT Control

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

- Up to 8 on/off cycles per day or 56 per week
- Battery back-up
- Wall mount or outdoor enclosure options
- Wall mount fits any 4" x 4" electrical box



TC7D-W
Wall Mount

CO2 SENSORS (CO2-W, CO2-D)

- Adjustable control from 400–2000 PPM
- Digital display
- 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

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
- Internal menu for easy set-up



IAQ-W
Wall Mount

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

- Passive infrared sensor
- Adjustable time-off delay to 30 minutes
- 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

BACNET FAN CONTROL ***

- Adds remote fan control functionally
- Set unit on/off status or turn on high speed—functionally model dependent
- Local control without opening unit and/or BMS override via BACnet MS/TP
- 24VAC power requirement
- Wired connection to unit and BMS
- LCD display
- Wall mount



BACNETFC-W
Wall Mount

ACCESSORIES

See controls accessory table below or 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.

CONTROLS AVAILABLE BY MODEL

	SL75	EV Premium S, M, L, X
Percentage Timer (PTL)	◆ ²	◆ ²
Percentage Timer with Furnace Interlock (FM)	◆ ²	◆ ²
Push-Button Point of Use Timer (PBL)	◆ ²	◆ ²
Push-Button Boost Timer (PBT)	◆ ²	◆ ²
Digital Time Clock (TC7D-W, TC7D-E)	◆ ^{1, 2}	◆ ^{1, 2}
CO ₂ Sensors (C02-W, C02-D)	◆ ^{1, 2}	◆ ^{1, 2}
IAQ Sensors (IAQ-W, IAQ-D)	◆ ^{1, 2}	◆ ^{1, 2}
Motion Occupancy Sensors (MC-C, MC-W)	◆ ^{1, 2}	◆ ^{1, 2}
BACnet Fan Control (BACNETFC-W)	◆ ^{1, 2}	◆ ^{1, 2}

Notes

1. 24VAC power requirement, ERV internal transformer supplied.
2. Turns on high speed either with ERV operating continuously at low speed or intermittently with low speed at 0. Speeds set on ERV.

MOUNTING

WALL BRACKET KIT (SL ONLY)

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



Wall Bracket Kit

FILTERS

MERV 13 FILTERS

- ◆ Electrostatically charged filter fibers
- ◆ Single die-cut construction frame
- ◆ Moisture-resistant construction
- ◆ High holding capacity design
- ◆ Expanded metal reinforcement
- ◆ Shipped loose



MERV 13 Filter

ACCESSORIES

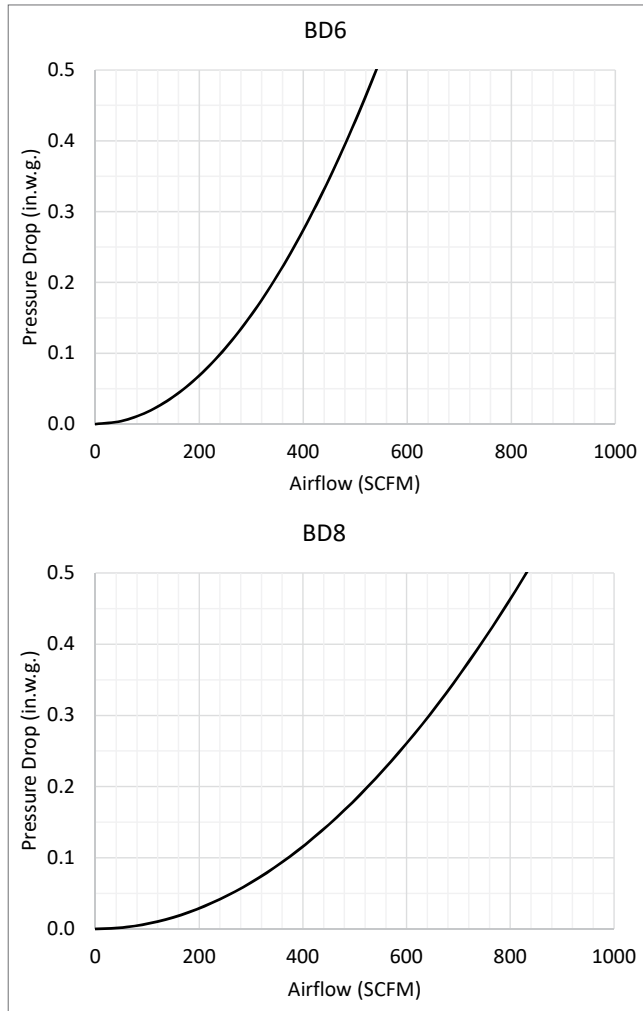
See individual submittal pages for compatibility by model.

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

- ♦ Mechanical "butterfly" design
- ♦ Male/female ends



PRESSURE DROP PERFORMANCE



AUTOMATIC BALANCING DAMPER (ABV-4, ABV-5 & ABV-6)

- ♦ 4", 5" and 6"
- ♦ Maintains a constant airflow volume with calibrated set points
- ♦ Set point range ABV-4 and ABV-5: 30–125 CFM, ABV-6: 60–240 CFM
- ♦ Recommended use with static pressures under 1.0 in. w.g.



6" & 8" MOTORIZED DAMPERS

- ♦ 24VAC powered to open
- ♦ Prevent unwanted airflow through ERV when adverse outdoor air conditions, such as wildfire smoke are present or to meet local codes
- ♦ Range of kits to accommodate different installation applications. Use the table below to identify the correct kit for a particular installation



Damper Kits				
Damper Kit	MD6-FM	MD6-PT	MD6	MD8
Diameter	6"			8"
ERV has a "DAMP" terminal	No		Yes	
Furnace interlock required	Yes	No*		

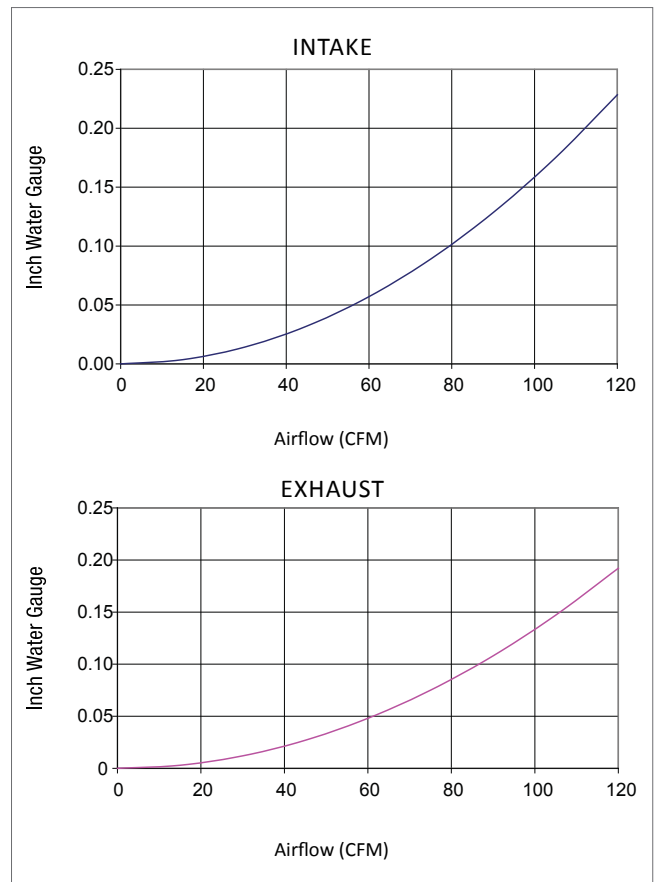
*Furnace interlock may still be used, but must be purchased separately.

CONCENTRIC VENT (CV6-110)

- ♦ Maximum airflow 110 CFM
- ♦ Simplifies installation with only one 6" diameter hole through exterior walls
- ♦ Fits both 5" or 6" diameter insulated flexible ducts
- ♦ Complies with ASHRAE 62.2-2019



PRESSURE DROP PERFORMANCE



ACCESSORIES

See individual submittal pages for compatibility by model.

6" VINYL LOUVERED WALL VENTS (VB106 & VW106)

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

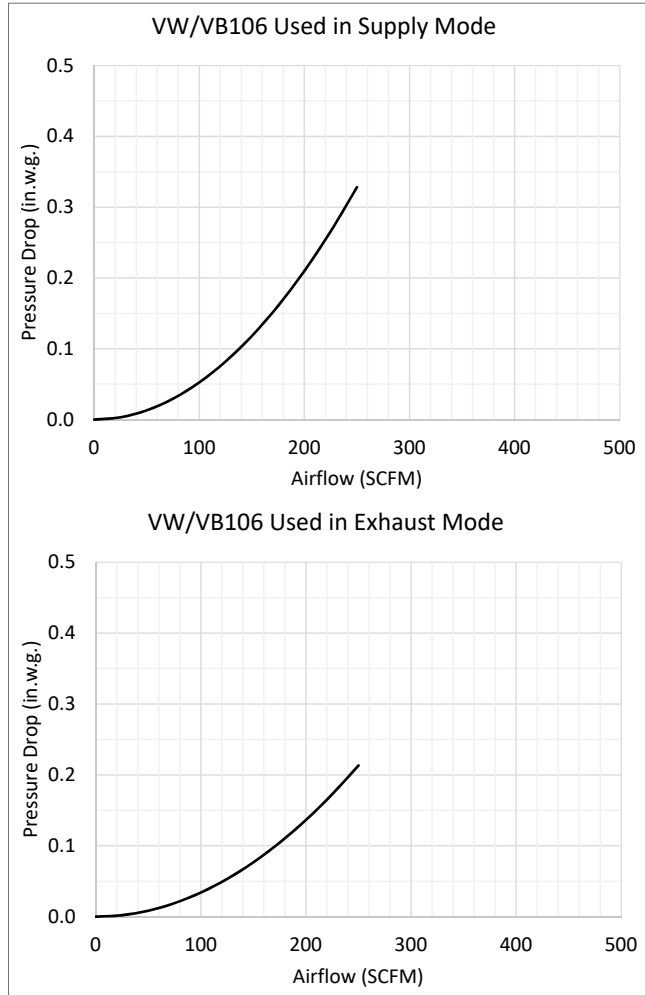


8" VINYL LOUVERED WALL VENTS (VT8)

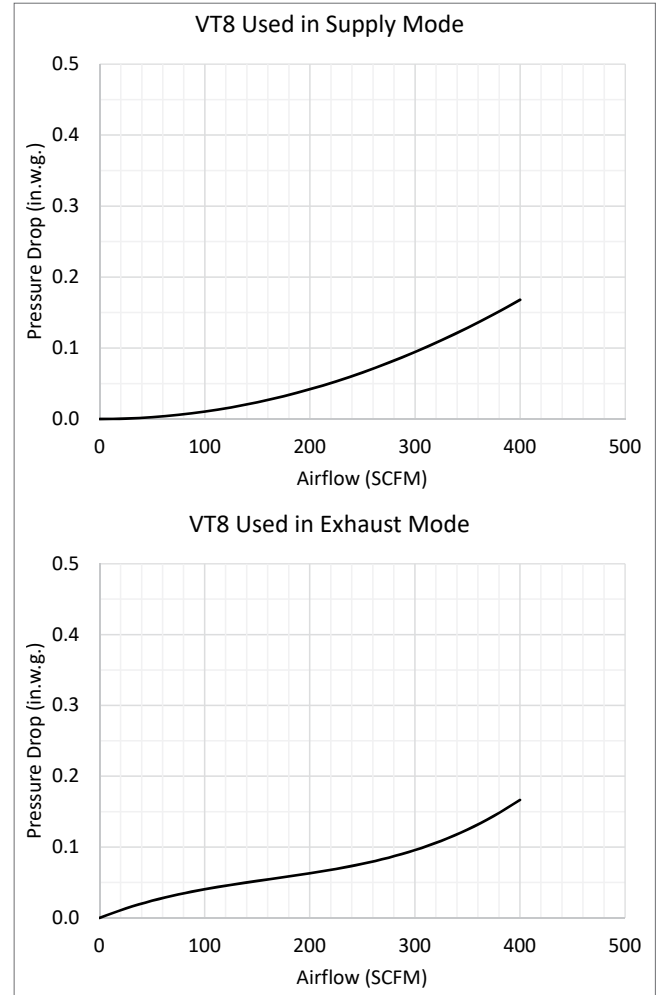
- Taupe
- 1 1/2" channel for siding
- 4 removeable flaps
- 1/4" plastic screen



PRESSURE DROP PERFORMANCE



PRESSURE DROP PERFORMANCE



ACCESSORIES

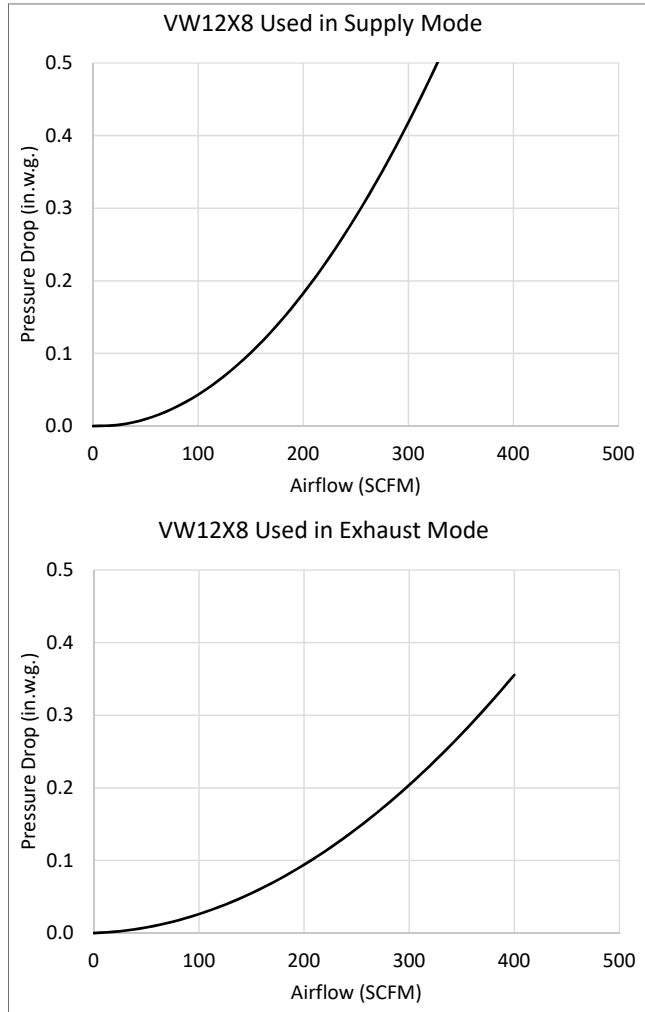
See individual submittal pages for compatibility by model.

12" x 8" GALVANIZED LOUVERED WALL VENTS (VW12 x 8)

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

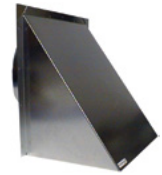


PRESSURE DROP PERFORMANCE

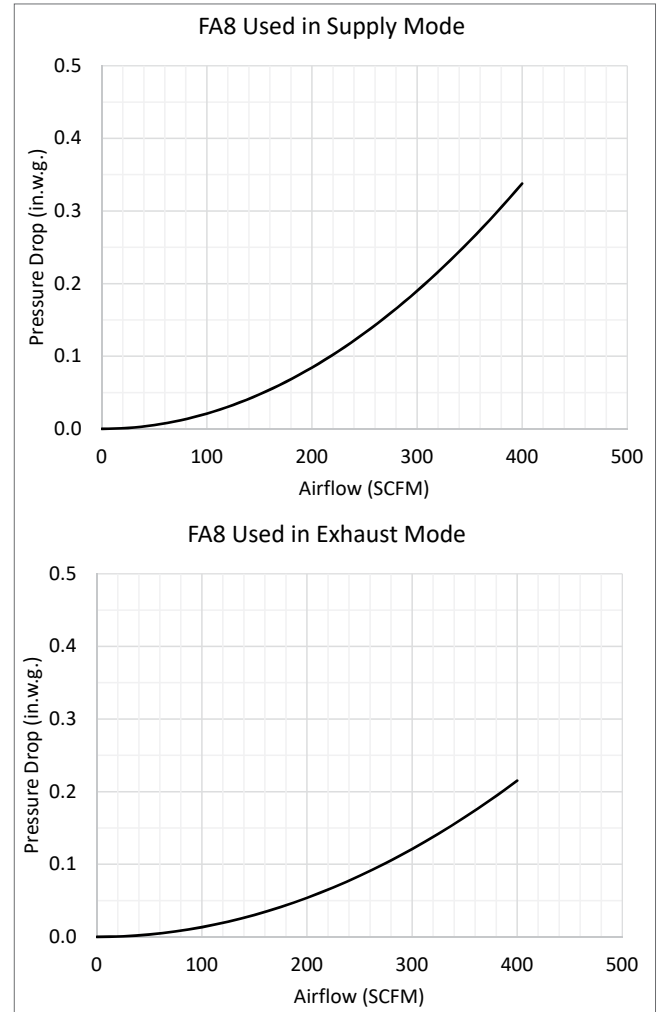


8" GALVANIZED HOODED WALL VENTS (FA8-G) & W8" GALVANNEAL HOODED WALL VENTS (FA8-P)

- ♦ Paintable (galvanneal only)
- ♦ 1/4" metal screen



PRESSURE DROP PERFORMANCE



ACCESSORIES

See individual submittal pages for compatibility by model.

ELECTRIC DUCT HEATERS

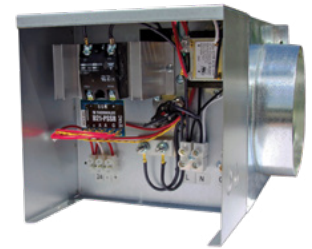
RH SERIES

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 or configurable electric duct heaters as an accessory to our 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.

Available on single/multi-family and light commercial units (some exceptions apply).



RH-D
Integral Thermostat



RH-W
Wall-Mount Thermostat

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.

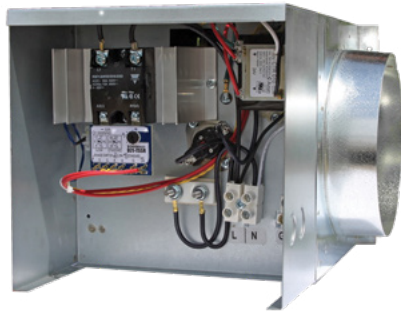
RH SERIES

ELECTRIC DUCT HEATER (1-11.5 kW) ACCESSORY

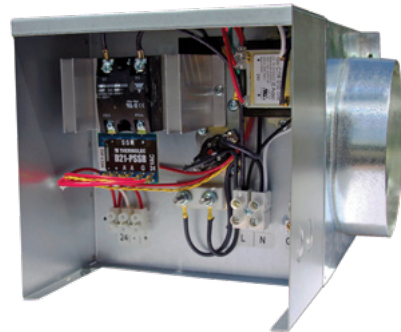


ELECTRIC DUCT HEATER

SPECIFICATIONS



RH-D (Integral Thermostat)



RH-W (Wall-Mount Thermostat)

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

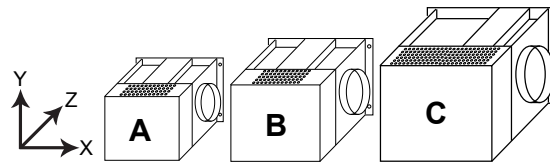
Standard Features:

- 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)

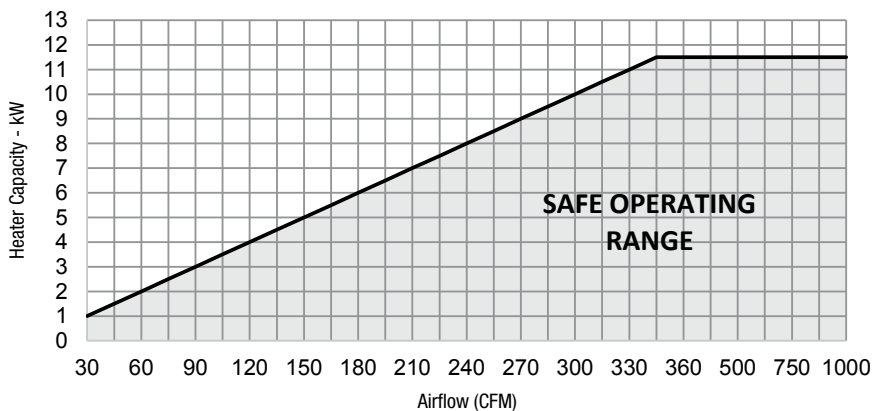
Note: Electric duct heater designed for indoor ductwork installation only.



Duct Collar Sizes (in.)	kW	Volts	Size	Width (X) (in.)	Height (Y) (in.)	Depth (Z) (in.)	Max. Wt. (lbs.)
6	1, 2	120, 208, 240	A	11 1/2	8	11 1/2	10
8	3, 4, 5	208	B	11 1/2	10	13 1/2	15
8	3, 4, 5, 6	240	B	11 1/2	10	13 1/2	15
10	3, 4, 5	208	C	15 1/2	12	15 1/2	20
10	3, 4, 5, 6, 8, 10, 11.5	240	C	15 1/2	12	15 1/2	20
12	6, 8, 10, 11.5	240	C	15 1/2	12	15 1/2	20

RH SERIES HEATER CAPACITY

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



RH SERIES CONFIGURATIONS

Duct Collar Size (in)	Voltage (1P, 60 Hz)	Heater Capacity (kW)	Line Amps	Wire Gauge	Fuse Amps	Thermostat	Part Number	Configuration
6	120	1	8.33	12	15	Integral	131320	RHD1120-6
						Wall Mount	131324	RHW1120-6
		2	16.66	12	20	Integral	131321	RHD2120-6
						Wall Mount	131325	RHW2120-6
	208	1	4.80	12	15	Integral	131352	RHD1208-6
						Wall Mount	131363	RHW1208-6
		2	9.61	12	15	Integral	131354	RHD2208-6
						Wall Mount	131365	RHW2208-6
	240	1	4.16	12	15	Integral	131353	RHD1240-6
						Wall Mount	131364	RHW1240-6
		2	8.33	12	15	Integral	131355	RHD2240-6
						Wall Mount	131366	RHW2240-6
8	208	3	14.42	12	20	Integral	131356	RHD3208-8
						Wall Mount	131367	RHW3208-8
		4	19.23	10	30	Integral	131357	RHD4208-8
						Wall Mount	131368	RHW4208-8
		5	24.03	10	30	Integral	131358	RHD5208-8
						Wall Mount	131369	RHW5208-8
	240	3	12.50	12	15	Integral	131322	RHD3240-8
						Wall Mount	131326	RHW3240-8
		4	16.66	12	20	Integral	131323	RHD4240-8
						Wall Mount	131327	RHW4240-8
		5	20.83	10	30	Integral	131359	RHD5240-8
						Wall Mount	131370	RHW5240-8
6	25.00	10	40	Integral	131360	RHD6240-8		
				Wall Mount	131371	RHW6240-8		
10	208	3	14.42	12	20	Integral	131336	RHD3208-10
						Wall Mount	131328	RHW3208-10
		4	19.23	10	30	Integral	131338	RHD4208-10
						Wall Mount	131330	RHW4208-10
		5	24.03	10	30	Integral	131340	RHD5208-10
						Wall Mount	131332	RHW5208-10
	240	3	12.50	12	15	Integral	131337	RHD3240-10
						Wall Mount	131329	RHW3240-10
		4	16.66	12	20	Integral	131339	RHD4240-10
						Wall Mount	131331	RHW4240-10
		5	20.83	10	30	Integral	131341	RHD5240-10
						Wall Mount	131333	RHW5240-10
	6	25.00	10	40	Integral	131342	RHD6240-10	
					Wall Mount	131334	RHW6240-10	
	240	8	33.33	8	50	Integral	131343	RHD8240-10
						Wall Mount	131348	RHW8240-10
		10	41.66	6	60	Integral	131361	RHD10240-10
						Wall Mount	131372	RHW10240-10
11.5		47.91	6	60	Integral	131362	RHD11-1/2240-10	
					Wall Mount	131373	RHW11-1/2240-10	
12	240	6	25.00	10	40	Integral	131344	RHD6240-12
						Wall Mount	131335	RHW6240-12
		8	33.33	8	50	Integral	131345	RHD8240-12
						Wall Mount	131349	RHW8240-12
		10	41.66	6	60	Integral	131346	RHD10240-12
						Wall Mount	131350	RHW10240-12
		11.5	47.91	6	60	Integral	131347	RHD11-1/2240-12
						Wall Mount	131351	RHW11-1/2240-12

MOTORIZED DAMPERS



SPECIFICATIONS

Damper Type: Round Motorized Damper	Standard Features:
Diameters: 6", 8"	Corrosion-resistant galvanized steel
Operating Mode: Normally closed, spring return	Foam blade seal
Voltage: 24VAC, 0.36A	FM interlock (MD6-FM only)
	Plug-in transformer (MD6-PT only)

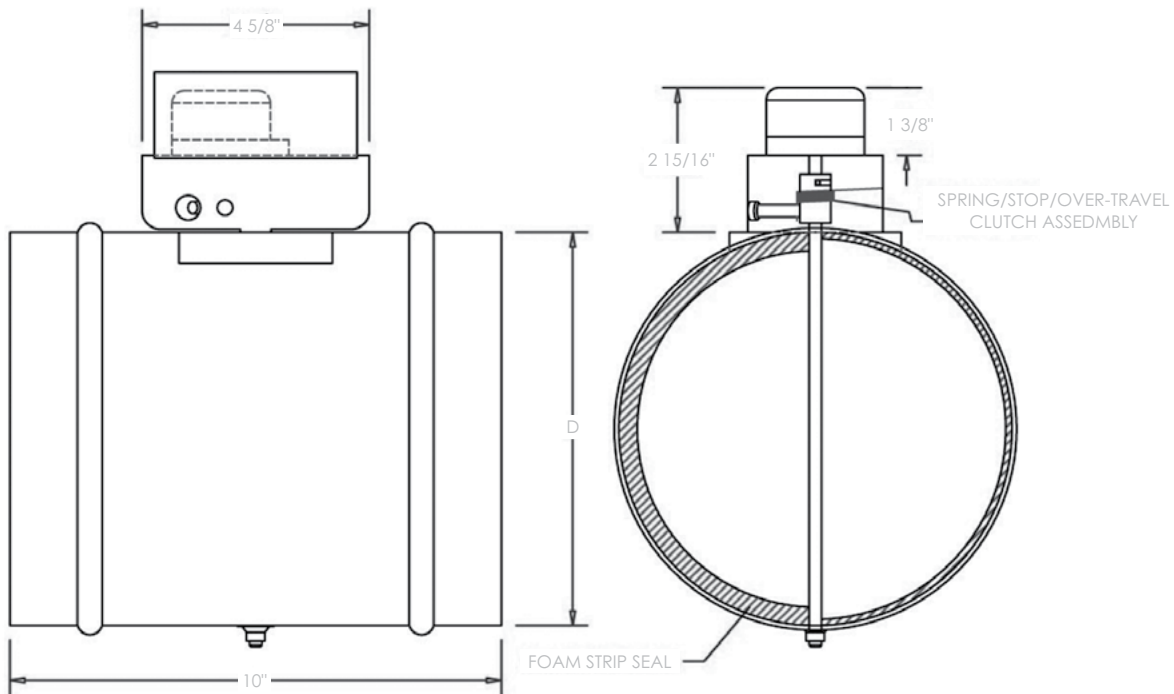
Note: Motorized damper designed for indoor ductwork installation only.

APPLICATIONS

Prevent unwanted airflow through the energy recovery ventilator (ERV) when adverse outdoor air conditions, such as wildfire smoke are present or to meet local codes. The ENERGY STAR Single Family New Homes and ENERGY STAR Multifamily New Construction programs require a motorized damper on the ERV supply airstream if connected to a ducted return of the HVAC system to restrict airflow during ventilation off-cycle and occupant override. The MD Series dampers installed per recommend methods (see MD Series manual) on the SA duct collar will meet this requirement.

KEY BENEFITS

- Quick to install as damper fits directly onto ERV round duct collars
- Floating motor mount assures proper alignment of motor, shaft and damper to prevent binding
- Clutch/coupler reduces the number of moving parts for greater service life
- Flow control adjustment so that the damper blade can be blocked from opening or closing 100%, if applicable



SELECTION GUIDE

Damper Kit	MD6-FM	MD6-PT	MD6	MD8
Diameter	6"			8"
ERV has a "DAMP" terminal*	No		Yes	
Furnace interlock required	Yes	No**		

* ERVs with "DAMP" terminal can power one MD damper.

** Furnace interlock may still be used, but must be purchased separately.

SOUND DATA

SL75/H

Source	CFM	Sound Power Level (dB)								Lw (dB)	LwA (dBA)	Sones
		62.5 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz			
Case Radiated	51	57	54	46	37	31	27	18	18	59	43	0.2
	118	59	58	57	52	40	35	25	29	63	52	1.5
	155	60	60	59	54	44	40	28	32	65	55	2.1
Room Inlet (SA)*	37	73	62	52	46	38	29	27	28	73	51	1.7
	108	76	65	55	48	39	31	28	29	77	54	2.5
	145	78	67	56	49	40	31	29	30	78	56	2.9
Room Outlet (RA)*	36	60	57	53	49	36	30	27	21	63	49	0.8
	105	64	56	51	48	34	27	24	19	65	48	0.9
	147	68	63	54	47	39	29	28	34	69	51	1.6
Room Inlet (SA)**	37	57	47	42	35	31	25	18	20	57	39	0.0
	110	60	56	49	44	33	25	23	16	61	46	0.4
	150	65	59	56	56	45	40	29	32	67	55	1.9
Room Outlet (RA)**	39	58	50	46	31	31	23	19	19	59	41	0.1
	108	60	53	51	43	31	27	23	15	61	45	0.4
	148	61	58	53	45	34	29	25	18	63	48	0.7

Note: *Hard ducted 1m to measurement area.
 **Insulated flex duct 5' to measurement area.

EV PREMIUM S/SH

Source	CFM	Sound Power Level (dB)								Lw (dB)	LwA (dBA)	Sones
		62.5 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz			
Case Radiated	39	62	49	38	47	37	27	20	18	63	46	0.6
	125	72	58	55	56	44	36	26	20	72	55	2.2
	172	75	63	60	53	45	30	28	28	76	56	2.6
Room Inlet (SA)*	38	69	67	68	68	69	66	62	58	76	73	3.0
	132	78	76	76	70	69	64	64	65	82	75	4.0
	180	80	78	77	71	71	68	67	65	84	76	4.8
Room Outlet (RA)*	38	56	49	49	50	51	49	44	38	59	55	0.1
	126	59	57	55	55	55	55	54	55	65	62	1.2
	181	57	57	59	60	60	58	56	56	67	65	1.9
Room Inlet (SA)**	40	51	48	40	35	36	37	35	33	53	43	0.0
	127	55	54	51	50	47	47	46	46	60	54	0.1
	173	57	56	55	54	53	52	50	48	63	59	0.4
Room Outlet (RA)**	40	51	49	46	45	46	44	38	36	56	50	0.0
	127	54	53	53	52	52	53	53	51	62	59	0.5
	172	56	56	57	57	57	56	54	52	65	62	0.7

Note: *Hard ducted 1m to measurement area.
 **Insulated flex duct 5' to measurement area.

Sound Data: Actual sound levels in living spaces will vary and be dependent on installation conditions including unit location, duct type, duct size, and duct run length. Sones calculated using HVI 915 method from Lw values.

Testing Method: Testing conducted per the following standards: AHRI 230 and 260, ISO 9614-1 and 9614-2. Testing conducted internally at RenewAire.

SOUND DATA

EV PREMIUM M/MH

Source	CFM	Sound Power Level (dB)								Lw (dB)	LwA (dBA)	Sones
		62.5 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz			
Case Radiated	85	63	54	52	44	38	33	20	24	64	47	0.7
	175	61	57	63	54	44	43	36	35	66	56	2.8
	224	65	57	60	58	53	50	44	41	68	59	3.4
Room Inlet (SA)*	91	62	61	58	54	54	55	55	54	67	62	1.3
	181	68	67	65	63	60	60	62	62	73	68	2.8
	232	72	68	67	66	64	63	63	65	76	71	3.8
Room Outlet (RA)*	86	70	66	63	63	63	63	59	57	74	69	2.2
	177	68	66	65	63	63	63	66	66	74	72	4.6
	229	67	64	62	63	63	65	66	69	74	73	5.7
Room Inlet (SA)**	83	53	52	51	48	48	45	45	41	58	53	0.0
	168	54	53	52	51	51	50	50	49	61	57	0.3
	204	58	56	56	54	54	54	53	51	64	60	0.5
Room Outlet (RA)**	81	53	47	49	46	46	41	42	40	56	51	0.0
	156	60	57	57	55	54	52	52	50	64	60	0.5
	195	64	61	60	60	59	57	55	56	69	64	1.7

Note: *Hard ducted 1m to measurement area.

**Insulated flex duct 5' to measurement area.

EV PREMIUM L/LH

Source	CFM	Sound Power Level (dB)								Lw (dB)	LwA (dBA)	Sones
		62.5 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz			
Case Radiated	104	63	56	57	53	43	34	21	24	65	53	1.6
	190	64	60	63	58	47	47	40	35	68	59	3.3
	246	70	64	60	56	55	53	45	41	72	60	3.8
Room Inlet (SA)*	113	63	61	59	55	55	55	55	55	68	62	1.4
	211	68	64	64	62	60	61	62	63	73	69	3.0
	258	72	70	67	65	63	63	64	65	76	71	3.9
Room Outlet (RA)*	110	62	60	59	57	57	58	57	56	68	64	2.0
	211	63	61	61	61	61	64	67	67	73	72	4.5
	249	63	62	62	62	63	66	67	71	75	74	6.0
Room Inlet (SA)**	116	52	50	48	47	47	46	43	39	57	52	0.0
	208	56	54	54	53	53	52	51	50	62	59	0.5
	258	58	55	55	55	55	54	53	51	64	61	0.6
Room Outlet (RA)**	125	55	52	48	47	47	44	42	38	59	52	0.0
	202	64	63	61	60	58	57	55	53	69	64	1.0
	261	66	65	63	61	59	58	57	55	71	66	1.2

Note: *Hard ducted 1m to measurement area.

**Insulated flex duct 5' to measurement area.

Sound Data: Actual sound levels in living spaces will vary and be dependent on installation conditions including unit location, duct type, duct size, and duct run length. Sones calculated using HVI 915 method from Lw values.

Testing Method: Testing conducted per the following standards: AHRI 230 and 260, ISO 9614-1 and 9614-2. Testing conducted internally at RenewAire.

SOUND DATA

EV PREMIUM X/XH

Source	CFM	Sound Power Level (dB)								Lw (dB)	LwA (dBA)	Sones
		62.5 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz			
Case Radiated	85	52	48	49	34	32	28	22	18	55	42	0.3
	243	59	58	57	58	42	38	30	31	64	56	2.1
	390	67	64	59	62	52	41	32	32	70	60	3.2
Room Inlet (SA)*	85	52	52	49	39	33	30	26	24	56	43	0.3
	243	55	61	58	60	46	44	40	43	65	59	3.2
	390	56	60	58	61	47	45	40	43	65	59	3.3
Room Outlet (RA)*	85	56	48	45	35	32	26	20	19	57	40	0.0
	243	64	61	56	50	37	34	24	30	66	52	1.4
	390	64	60	56	49	37	34	25	31	66	51	1.3
Room Inlet (SA)**	85	55	48	34	28	26	18	6	-0	55	35	0.0
	243	60	54	45	41	33	26	19	24	61	43	0.3
	390	62	54	45	40	32	26	20	27	63	44	0.4
Room Outlet (RA)**	85	54	50	44	33	27	25	5	9	56	39	0.0
	243	60	54	46	42	30	25	27	28	61	44	0.4
	390	62	54	46	42	33	27	27	30	63	44	0.5

Note: *Hard ducted 1m to measurement area.
**Insulated flex duct 5' to measurement area.

Sound Data: Actual sound levels in living spaces will vary and be dependent on installation conditions including unit location, duct type, duct size, and duct run length. Sones calculated using HVI 915 method from Lw values.

Testing Method: Testing conducted per the following standards: AHRI 230 and 260, ISO 9614-1 and 9614-2. Testing conducted internally at RenewAire.

HVI TESTED/CERTIFIED

PER CSA C439



SL75H/SL75 – Ventilation Performance							
External Static Pressure		Net Supply Airflow		Gross Airflow			
				Supply		Exhaust	
Pa	in. wg	L/s	CFM	L/s	CFM	L/s	CFM
25	0.1	65	138	68	144	68	144
50	0.2	62	131	65	138	65	138
75	0.3	59	125	62	131	62	131
100	0.4	55	117	58	123	59	125
125	0.5	52	110	55	117	55	117
150	0.6	48	102	51	108	51	108
175	0.7	45	95	47	100	47	100
200	0.8	41	87	43	91	43	91
225	0.9	37	78	39	83	39	83
250	1.0	32	68	34	72	35	74
275	1.1	28	59	29	61	30	64
300	1.2	23	49	24	51	26	55

SL75H/SL75 – Energy Performance							
Supply Temperature		Net Airflow		Average Power Watts	Sensible Recovery Efficiency %	Adjusted Sensible Recovery Efficiency %	Net Moisture Transfer %
C°	F°	L/s	CFM				
Heating							
0°	32°	24	51	30	78	82	64
0°	32°	36	76	50	74	79	56
0°	32°	47	100	79	70	75	50
Cooling					Total Recovery Efficiency %	Adjusted Total Recovery Efficiency %	
35°	95°	25	53	32			

EV Premium SH/EV Premium S – Ventilation Performance							
External Static Pressure		Net Supply Airflow		Gross Airflow			
				Supply		Exhaust	
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	35	74	37	78	32	68

EV Premium SH/EV Premium S – Energy Performance							
Supply Temperature		Net Airflow		Average Power Watts	Sensible Recovery Efficiency %	Adjusted Sensible Recovery Efficiency %	Net Moisture Transfer %
C°	F°	L/s	CFM				
Heating							
0°	32°	24	51	28	74	77	58
0°	32°	36	76	48	69	73	49
0°	32°	48	102	78	66	71	42
Cooling					Total Recovery Efficiency %	Adjusted Total Recovery Efficiency %	
35°	95°	24	51	32			

EV Premium MH/EV Premium M – Ventilation Performance							
External Static Pressure		Net Supply Airflow		Gross Airflow			
				Supply		Exhaust	
Pa	in. wg	L/s	CFM	L/s	CFM	L/s	CFM
25	0.1	114	242	115	244	117	248
50	0.2	110	233	112	237	113	239
75	0.3	107	227	108	229	110	233
100	0.4	103	218	104	220	106	225
125	0.5	99	210	101	214	102	216
150	0.6	96	203	97	206	98	208
175	0.7	92	195	93	197	94	199
200	0.8	88	186	89	189	90	191
225	0.9	85	180	86	182	86	182
250	1.0	81	172	82	174	82	174

EV Premium MH/EV Premium M – Energy Performance							
Supply Temperature		Net Airflow		Average Power Watts	Sensible Recovery Efficiency %	Adjusted Sensible Recovery Efficiency %	Net Moisture Transfer %
C°	F°	L/s	CFM				
Heating							
0°	32°	24	51	19	81	84	69
0°	32°	48	102	40	73	76	55
0°	32°	71	150	81	68	71	46
0°	32°	96	203	177	62	68	40
Cooling					Total Recovery Efficiency %	Adjusted Total Recovery Efficiency %	
35°	95°	24	51	20			

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EV Premium LH/EV Premium L – Ventilation Performance							
External Static Pressure		Net Supply Airflow		Gross Airflow			
				Supply		Exhaust	
Pa	in. wg	L/s	CFM	L/s	CFM	L/s	CFM
100	0.4	131	278	132	280	132	280
125	0.5	126	267	127	269	126	267
150	0.6	121	256	122	259	121	256
175	0.7	115	244	116	246	115	244
200	0.8	110	233	111	235	110	233
225	0.9	105	222	105	222	104	220
250	1.0	99	210	100	212	98	208

EV Premium LH/EV Premium L – Energy Performance							
Supply Temperature		Net Airflow		Average Power Watts	Sensible Recovery Efficiency %	Adjusted Sensible Recovery Efficiency %	Net Moisture Transfer %
C°	F°	L/s	CFM				
Heating							
0°	32°	28	59	21	88	90	77
0°	32°	57	121	37	81	83	69
0°	32°	95	201	114	74	77	60
0°	32°	107	227	171	71	76	56
Cooling					Total Recovery Efficiency %	Adjusted Total Recovery Efficiency %	
35°	95°	29	61	20	76	77	

EV Premium XH/EV Premium X – Ventilation Performance							
External Static Pressure		Net Supply Airflow		Gross Airflow			
				Supply		Exhaust	
Pa	in. wg	L/s	CFM	L/s	CFM	L/s	CFM
25	0.1	189	400	192	407	193	409
50	0.2	184	390	188	398	189	400
75	0.3	180	381	184	390	185	392
100	0.4	176	373	179	379	180	381
125	0.5	171	362	175	371	176	373
150	0.6	167	354	170	360	172	364
175	0.7	163	345	166	352	167	354
200	0.8	159	337	162	343	163	345
250	1	150	318	153	324	154	326
300	1.2	141	299	144	305	145	307
350	1.4	133	282	135	286	136	288
400	1.6	124	263	127	269	127	269
500	2	107	227	109	231	108	229
600	2.4	90	191	91	193	90	191

EV Premium XH/EV Premium X – Energy Performance							
Supply Temperature		Net Airflow		Average Power Watts	Sensible Recovery Efficiency %	Adjusted Sensible Recovery Efficiency %	Net Moisture Transfer %
C°	F°	L/s	CFM				
Heating							
0°	32°	48	102	37	78	80	65
0°	32°	93	197	116	71	75	53
0°	32°	115	244	193	67	73	45
Cooling					Total Recovery Efficiency %	Adjusted Total Recovery Efficiency %	
35°	95°	48	102	43	66	68	



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**
- ◆ **ERVs improve IAQ** and **reduce costs**

INCREASED VENTILATION BENEFITS



TECHNICAL SALES SUPPORT

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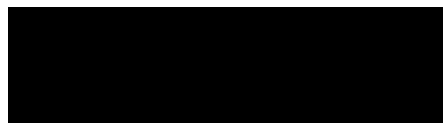
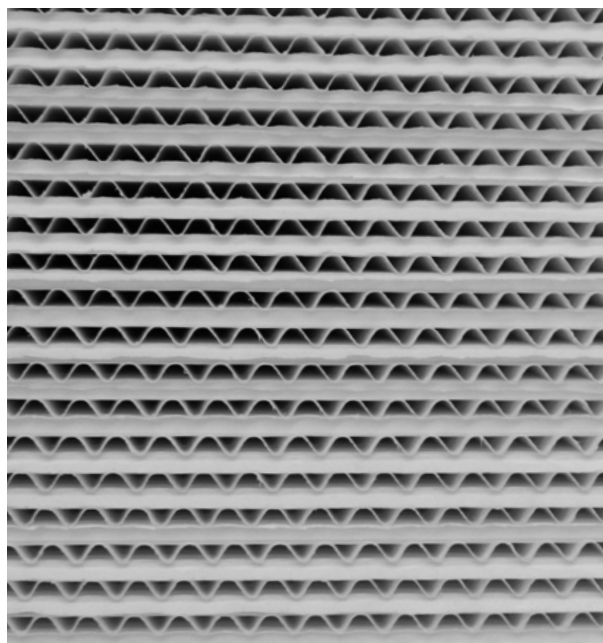
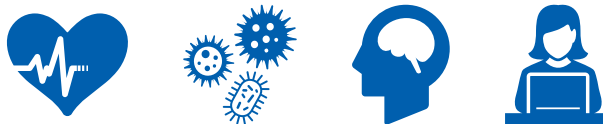
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