

Energy Recovery Ventilator Model ASSURE-120S-S1









The Affordable Balanced Ventilation Solution

Compact Energy Recovery Ventilator

Features:

- The ASSURE-120S-S1 energy recovery ventilator (ERV) is the perfect solution for single or multifamily installations with limited mechanical space.
- The **low-profile design** (9.75-inch height) simplifies installations in bulkheads and drop ceilings.
- 50-130 cfm operational range with three high-speed selections.
- Total Recovery Core: The cross-flow energy recovery core transfers heat and moisture between two airstreams without allowing cross contamination. Used for balanced mechanical ventilation in humid environments to reduce air conditioning (AC) energy costs. In colder climates, moisture transfer is reversed. The unit helps to moderate humidity and the core is a highly efficient heat exchanger. Can be easily removed for cleaning or service.
- HVI Certified
- Frost Prevention: Temperature sensor activated. Supply air shuts off to defrost core with warm exhaust air at high speed. Condensation lines are not required.





Additional Benefits

- A convenient hinged door without screws and a removable motor and electronic assembly allow for easy maintenance and service.
- Swing open junction box cover for quick access to the circuit board and DIP switches.
- Washable antimicrobial MERV-6 air filters in exhaust and supply airstreams. MERV-13 upgrade option is available.
- Brackets included for easy ceiling installation.
- 20-gauge prepainted galvanized steel for superior corrosion resistance, insulated to prevent exterior condensation.
- Available in mirrored and hardwired configurations upon request.





OPTIONAL ACCESSORIES:

Control Options

All controls offer continuous ventilation, continuous low-speed operation, 3-wire connection and are compatible with the Wireless Timer (435248).

Additional Features	Precision- SYNC Digital Wall Control (435244)	Two-Speed Switch with Humidity Sensor (435245)	Two-Speed Switch with Intermittent Mode (435246)
5-speed fan operation on each mode	✓		
2-speed fan operation (Low/High)		✓	✓
Humidity control with adjustable dehumidistat	✓	✓	
Large digital LCD screen	✓		
LED status indicator lights		✓	✓
20 ON/40 OFF	✓		✓
10 ON/50 OFF	✓		
20/40/60 min. high-speed override button	✓		

435244

PRECISION SYNC







485673







HAVEN IAQ Control Bundle

Using the HAVEN Central Air Monitor and Central Air Controller (485673) in combination with your Greenheck ASSURE or SYNC ERV and up to one additional HVAC device (e.g. dehumidifier) provides automated indoor air quality management for a **simple, affordable indoor air quality system**.

The Monitor measures whole-house airflow and detects particles (PM2.5), chemicals (VOC), temperature, and relative humidity in the air and uses its readings to inform the Controller when to automate your ERV to temporarily initiate HIGH Fan speed ventilation. The ERV will return to the selected operational mode and fan speed setting when the detected event is cleared from the Central Air Monitor.

Timer Options

20/40/60 Minute Timer (435247)

Initiates high speed ventilation for 20, 40 or 60 minutes. 3-wire connection.

20/40/60 Minute Wireless Timer (435248)

Initiates high speed ventilation for 20, 40 or 60 minutes. Wirelessly connects to main control for ease of installation. 40 ft approximate range. Pair with the Wireless Repeater (435249) to extend the range of the timer.

Additional Accessories

Dual Intake and Exhaust Hood (435250)

Features a 5-inch dual hood. Ideal for space constrained ERV applications, with only one 6-inch opening required for intake/exhaust.

MERV 13 Filter (485463)

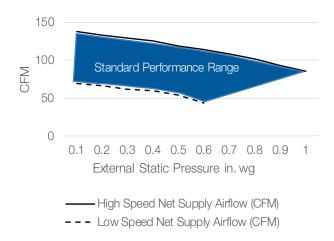
MERV 13 filters are designed to offer added protection from dust, pollen, mold, bacteria, and any airborne particles with a size of 0.3 microns (µm).



Performance

Airflow Performance

Ext. Static Pressure (in. wg)	High Speed Net Supply Airflow (CFM)	Power (Watts)	CFM/Watt
0.1	138	154	0.90
0.2	133	152	0.88
0.3	129	149	0.87
0.4	125	147	0.85
0.5	119	144	0.83
0.6	114	141	0.81
0.7	108	137	0.79
0.8	102	135	0.76
0.9	93	130	0.72
1.0	85	126	0.67



Energy Performance

		Outdoor Air Conditions		Indoor Air Conditions		Net Airflow (Watts)	CFM/ Watt	Sensible Recovery	Apparent Sensible	Adjusted Sensible Recovery	Latent Recovery	Total Recovery	Adjusted Total Recovery	Electrical Specifications	
		Temp	RH %	Temp	RH %	(CFM)	(walls)	wall	Efficiency	Effectiveness	Efficiency	necovery	Efficiency	Efficiency	Specifications
					49	60	0.82	69%	83%	78%	55%	-	-		
Hea	ating	32° F	75%	71.6° F	40%	64	64	1.00	68%	79%	-	-	-	-	
						96	100	0.96	66%	74%	-	-	-	-	120V/60hz/1.4A
Cor	Cooling	95° F	50%	75° F	50%	49	60	0.82	60%	73%	-	44%	45%	50%	120 17001127 1.474
Couling	90 1	10070	131	30 /0	64	-	-	-	-	-	-	45%	-		
												= h	HVI Certified	d Point	

Dimensions

Low Voltage Control Wire Terminal





Sound Performance

Speed Setting	Outlet CFM	Sones	dBA	
1	55	1.1	35.4	
2	72	1.7	38.6	
3	81	2.4	41	
4	100	3.0	43.3	
5	110	3.9	46.3	

NOTE: Data represents radiated sound measured at five feet at 0.1" static pressure in an accredited ACMA sound testing facility For additional sound performance, please consult ERV submittal.

Exhaust Supply Core 19.375" L Filters 5 Inch Duct Collars 20.75" Filtered Fresh Air Filtered Fresh Air Supplied From Outside Supplied To Inside Stale Air Exhausted Stale Air Exhausted From Inside To Outside

NOTE: Front clearance of 25 in. (635 mm) is recommended for servicing unit. All ducts use 5 in. (125 mm) round collars. MERV 13 upgrade: 485463

Weight: 34 lbs (15.5 kg) • Shipping weight: 36 lbs (16 kg)

