

VALENT ENERGY RECOVERY VENTILATORS

DESIGNED TO INCREASE OUTDOOR AIRFLOW

Valent energy recovery ventilators help to reduce a building's tempering loads. From outdoor, roof-mounted applications to indoor, ceiling-mounted units, Valent energy recovery ventilators offer installation flexibility. Each unit includes an enthalpy wheel or enthalpy core device with supply and exhaust blowers, along with factory pre-wired electrical components.

OUTDOOR AIR EXPERTS

- Valent has years of experience in energy recovery ventilation solutions
- Valent's application expertise can be helpful in the design process

HIGH EFFICIENCY OPTIONS

- With both enthalpy core and enthalpy wheel options, Valent has the device to best fit the application
- Incorporating energy recovery allows for equipment downsizing and lower energy costs throughout the life of the equipment, while delivering more outdoor air to the space

INSTALLATION FLEXIBILITY

- Indoor and outdoor mounting options to fit any project need
- A range of cabinet sizes to meet tight space constraints while effectively increasing outdoor airflow



VALENT ERV PRODUCTS AT A GLANCE

		VALENT ERV PRODUCTS					
		ENERGY RECOVERY WHEELS		ENERGY RECO	VERY CORES		
		ERW-M	ERW-E	ERC-M	ERC-E		
MOUNTING ERTECHNOLOGY	Polymer enthalpy wheel	Standard	Standard	Not applicable	Not applicable		
	Fiber enthalpy core	Not applicable	Not applicable	Standard	Standard		
	Polymer enthalpy core	Not applicable	Not applicable	Option	Option		
	Indoor	Standard	Not available	Standard	Option		
	Outdoor	Not available	Standard	Not available	Option		
AIRFLOW	Minimum (cfm)	150	300	150	300		
	Maximum (cfm)	900	6,000	1,000	5,000		
	Digital controller	Not available	Option	Not available	Option		
	BMS integration	Not available	Option	Not available	Option		
TIONS	Frost control	Option	Option	Option	Option		
CONTROL OPTIONS	Economizer	Not available	Option	Not available	Option		
CONT	Vari-Green® motors	Standard	Standard	Standard	Standard		
	Fan VFDs	Not applicable	Option	Not applicable	Standard		
	Motorized dampers	Not available	Option	Not available	Option		
CERTIFICATION	UL certified	✓	✓	✓	✓		
	AHRI 1060 certified	✓	✓	✓	✓		

M-Series

Available with either an enthalpy wheel or enthalpy core, these products have a smaller footprint. They are meant to be installed indoors, offering both ceiling hung or base mount options. Built with cost-conscious materials, the M-Series offers an affordable price point while still delivering the benefits of increased outdoor air and energy recovery.

E-Series

Available with either an enthalpy wheel or enthalpy core, these products are more robust. ERC-E models can be installed indoors or outdoors. The E-Series offers a wide array of selectable options such as embedded controls and BMS integration, Vari-Green® EC motors, and Fan VFDs.

TYPICAL APPLICATIONS

Typical Applications for Energy Recovery Ventilators

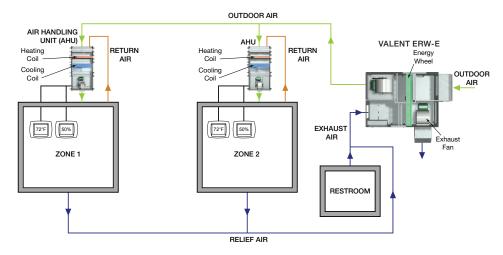
■ Churches

Dormitories

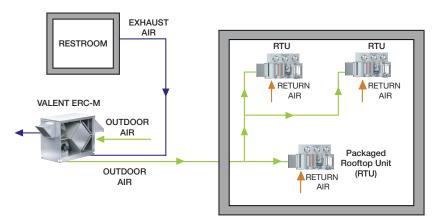
- Function Halls
- Office Buildings

- Locker Rooms
- Nursing Homes
- Schools
- Hospitals

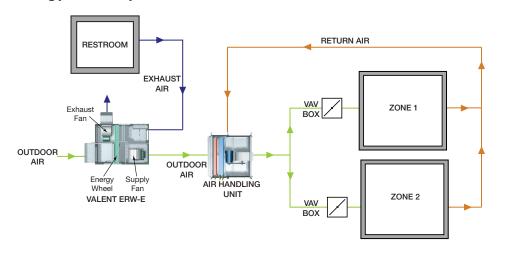
Energy Recovery with Ducted Air Handlers



Energy Recovery with Packaged Rooftop Equipment



Energy Recovery with Variable Air Volume



ERV Applications

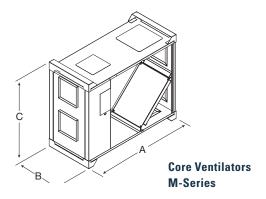
These diagrams illustrate how energy recovery units can be used in conjunction with other HVAC equipment. Fresh, outdoor air enters the energy recovery unit and is pretreated before entering the heating and cooling equipment.

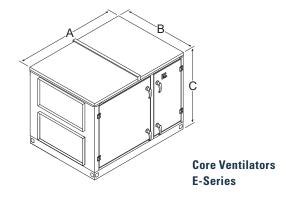
Whether ducting into terminal units, such as air handlers or directly feeding into a rooftop unit, preconditioners provide the ability to reduce the outdoor air load of these systems.

Recovering Restroom Exhaust

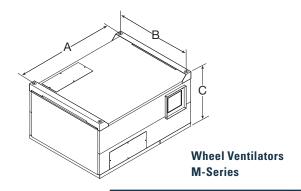
ASHRAE Standard 62.1 dictates that energy recovery devices rated for less than 10% crosscontamination can return restroom exhaust through the device. Any volume of air transferred through the device can be reclassified as fresh outdoor air. All of Valent's energy recovery units are rated well below the 10% limit. Therefore, it is allowable to return restroom exhaust and recommended to maximize the benefit.

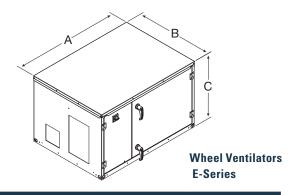
DIMENSIONS AND WEIGHTS





		DIMENSIONS (inches), WEIGHTS (pounds)					
		Airflow Range (cfm)	Length (A)	Width (B)	Height (C)	Approx. Weight	Mounting
MODEL	ERC-M1	150-600	47.3	16.3	39.4	215	Indoor
	ERC-M2	500-1,000	47.3	21.5	39.4	245	Indoor
	ERC-E1	300-1,250	54.8	28.9	43.9	485	Outdoor
	ERC-E2	750-2,400	60.0	43.8	44.9	813	Outdoor
	ERC-E3	1,600-3,750	60.0	61.3	44.9	1,075	Outdoor
	ERC-E4	1,600-5,000	60.0	81.0	44.9	1,279	Outdoor





		DIMENSIONS (inches), WEIGHTS (pounds)					
		Airflow Range (cfm)	Length (A)	Width (B)	Height (C)	Approx. Weight	Mounting
MODEL	ERW-M1	150-450	37.6	26.4	19.9	150	Indoor
	ERW-M2	450-900	43.2	33.0	23.8	250	Indoor
	ERW-E1	300-1,000	46.2	33.8	28.0	300	Outdoor
	ERW-E2	1,000-2,200	65.9	45.1	52.6	950	Outdoor
	ERW-E3	2,000-3,400	68.1	53.2	62.6	1,270	Outdoor
	ERW-E4	2,200-4,500	72.1	60.2	68.9	1,500	Outdoor
	ERW-E5	4,500-6,000	83.0	70.2	75.4	1,960	Outdoor

