

## 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



Shown here: Valent ERC-E2, Valent ERC-M2, and Valent ERW-E1

# VALENT ERV PRODUCTS AT A GLANCE

		VALENT ERV PRODUCTS				
		ENERGY RECOVERY WHEELS		ENERGY RECOVERY CORES		
		ERW-M	ERW-E	ERW-I	ERC-M	ERC-E
ER TECHNOLOGY	<b>Polymer enthalpy wheel</b>	Standard	Standard	Standard	Not applicable	Not applicable
	<b>Fiber enthalpy core</b>	Not applicable	Not applicable	Not applicable	Standard	Standard
	<b>Polymer enthalpy core</b>	Not applicable	Not applicable	Not applicable	Option	Option
MOUNTING	<b>Indoor</b>	Standard	Not available	Standard	Standard	Option
	<b>Outdoor</b>	Not available	Standard	Not available	Not available	Option
AIRFLOW	<b>Minimum (cfm)<sup>a</sup></b>	150	1,000	375	200	300
	<b>Maximum (cfm)<sup>a</sup></b>	900	6,000	2,500	900	5,000
CONTROL OPTIONS	<b>Digital controller</b>	Not available	Option	Standard	Not available	Option
	<b>BMS integration</b>	Not available	Option	Option	Not available	Option
	<b>Frost control</b>	Option	Option	Option	Option	Option
	<b>Economizer</b>	Not available	Option	Option	Not available	Option
	<b>Vari-Green® motors</b>	Standard	Standard	Option	Standard	Standard
	<b>Fan VFDs</b>	Not applicable	Option	Standard	Not applicable	Standard
	<b>Motorized dampers<sup>b</sup></b>	Not available	Option	Option	Not available	Option
	<b>UL certified</b>	✓	✓	✓	✓	✓
	<b>AHRI 1060 certified</b>	✓	✓	✓	✓	✓

a Based on 0.5" esp and balanced airflows.  
b All units include backdraft dampers. Motorized dampers are optional as noted by model.

## 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. 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.

## I-Series

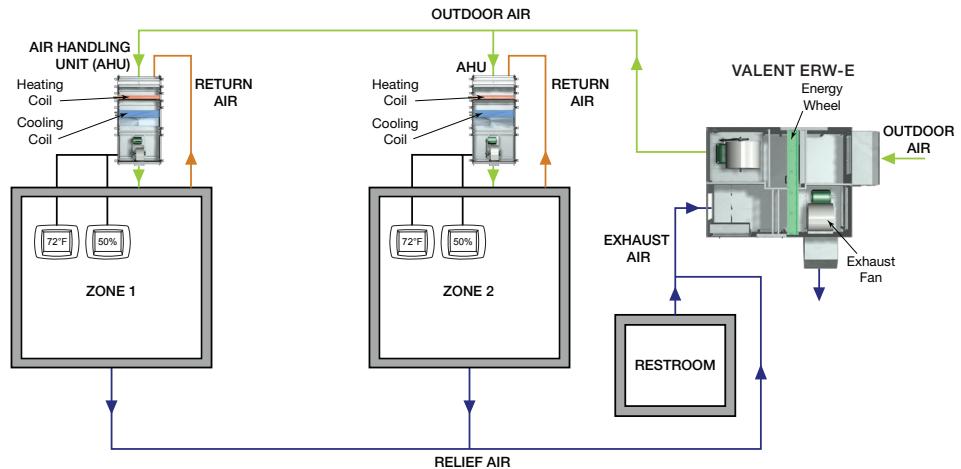
Featuring an enthalpy wheel, ERW-I products are modular designed to fit through 30" service doors. The I-Series offers full factory controls, single phase or three phase voltages and provides a diverse range of selectable options, such as Vari-Green® EC motors, and BMS integration.

# TYPICAL APPLICATIONS

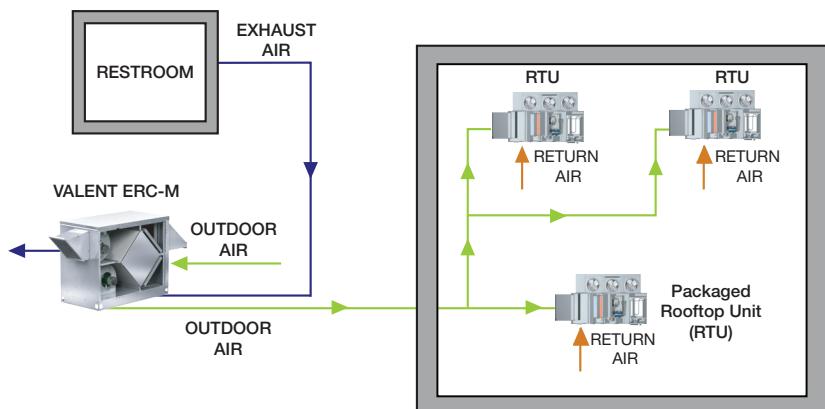
## Typical Applications for Energy Recovery Ventilators

- Churches
- Locker Rooms
- Dormitories
- Nursing Homes
- Function Halls
- Schools
- Office Buildings
- Hospitals

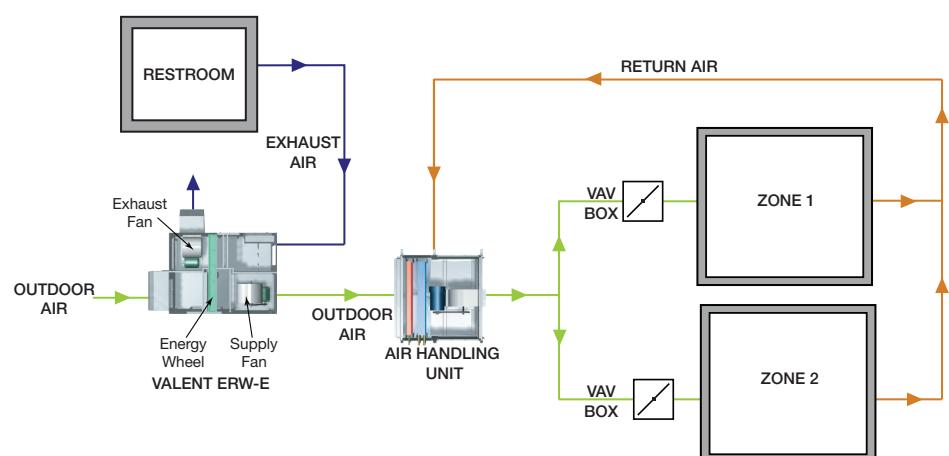
## Energy Recovery with Ducted Air Handlers



## Energy Recovery with Packaged Rooftop Equipment



## Energy Recovery with Variable Air Volume



## ERV Applications

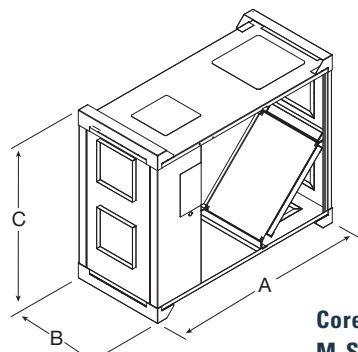
These diagrams illustrate how energy recovery units can be used in conjunction with other HVAC equipment. Fresh, outdoor air enters the energy recovery unit and is pretreated before entering the heating and cooling equipment.

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.

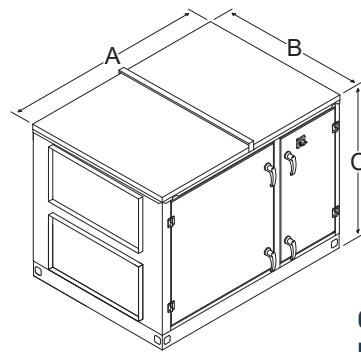
## Recovering Restroom Exhaust

ASHRAE Standard 62.1 dictates that energy recovery devices rated for less than 10% cross-contamination 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



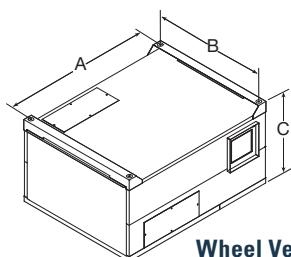
**Core Ventilators  
M-Series**



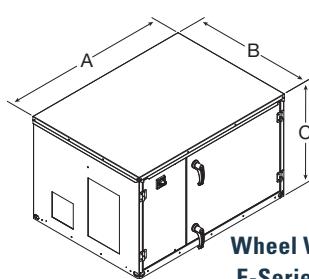
**Core Ventilators  
E-Series**

**DIMENSIONS (inches), WEIGHTS (pounds)**

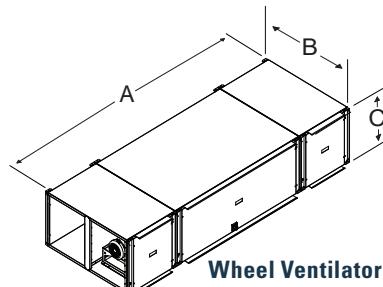
MODEL	Airflow Range (cfm)	Length (A)	Width (B)	Height (C)	Approx. Weight	Mounting
<b>ERC-M1</b>	150–600	47.3	16.3	39.4	215	Indoor
<b>ERC-M2</b>	500–1,000	47.3	21.5	39.4	245	Indoor
<b>ERC-E1</b>	300–1,250	54.8	28.9	43.9	485	Outdoor
<b>ERC-E2</b>	750–2,400	60.0	43.8	44.9	813	Outdoor
<b>ERC-E3</b>	1,600–3,750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



**Wheel Ventilators  
M-Series**



**Wheel Ventilators  
E-Series**



**Wheel Ventilators  
I-Series**

**DIMENSIONS (inches), WEIGHTS (pounds)**

MODEL	Airflow Range (cfm)	Length (A)	Width (B)	Height (C)	Approx. Weight	Mounting
<b>ERW-M1</b>	150–450	37.6	26.4	19.9	150	Indoor
<b>ERW-M2</b>	450–900	43.2	33.0	23.8	250	Indoor
<b>ERW-E1</b>	300–1,000	46.2	33.8	28.0	300	Outdoor
<b>ERW-E2</b>	1,000–2,200	65.9	45.1	52.6	950	Outdoor
<b>ERW-E3</b>	2,000–3,400	68.1	53.2	62.6	1,270	Outdoor
<b>ERW-E4</b>	2,200–4,500	72.1	60.2	68.9	1,500	Outdoor
<b>ERW-E5</b>	4,500–6,000	83.0	70.2	75.4	1,960	Outdoor
<b>ERW-I1</b>	375–1,500	106	37.0	18.0	700	Indoor
<b>ERW-I2</b>	750–2,500	114	43.0	23.0	800	Indoor



**valent**

OUTDOOR AIR EXPERTS | ROBUST DESIGNS | DEDICATED SUPPORT

[valentair.com](http://valentair.com)

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