



## RESIDENTIAL SYSTEM SOLUTIONS

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## VENTZONE® SYSTEMS

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RESIDENTIAL SYSTEM SOLUTIONS

TECHNICAL DOCUMENTATION





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# CHOOSE THE RIGHT OPTION FOR YOU...



**VentZone® Systems**

The VentZone® IAQ systems are the only central ventilation systems available that provide precisely regulated whole-house Indoor Air Quality and centralized bathroom fans in a single, highly effective and efficient ventilation kit. Each kit has the capability to provide low, continuous IAQ ventilation and zone-based on-demand “boost” ventilation.

## **2 OF OUR MOST POPULAR PRODUCTS MAKE UP THE VENTZONE® SYSTEM:**

The Zone Register Terminal® - Residential version (ZRT-R) and an ALDES Heat or Energy Recovery Ventilator (HRV or ERV).

ALDES ZRTs provide the zoned bathroom exhaust, and it's unlike anything else on the market today.

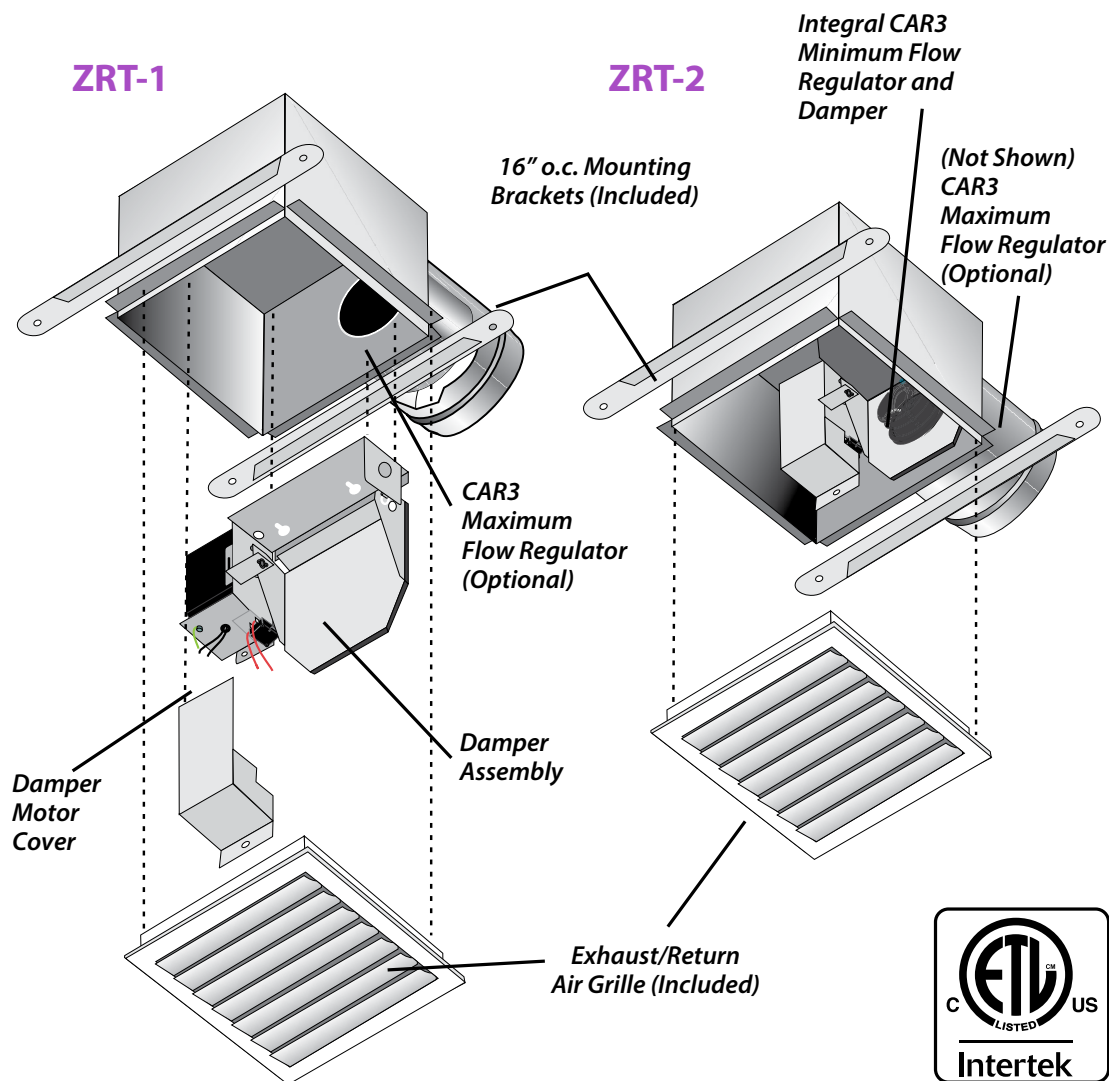
## **THE ALDES WAY:**

Centralized zoned bathroom exhaust. ZRTs take the place of individual fans or grilles like those found on remote inline fan kits. ZRTs are multifunctional in that they can provide two types of ventilation.

1. Continuous low-level ventilation every home needs to keep indoor air healthy.
2. Boosted ventilation as needed to remove humidity, odors and other pollutants in the bathroom.

ZRTs control the ventilation so that individual bathrooms are only exhausted as needed. Also known as demand controlled ventilation, controlling the airflow on a zone-by-zone basis saves energy and reduces the load on heating and cooling systems.



**VENTZONE® SYSTEMS**


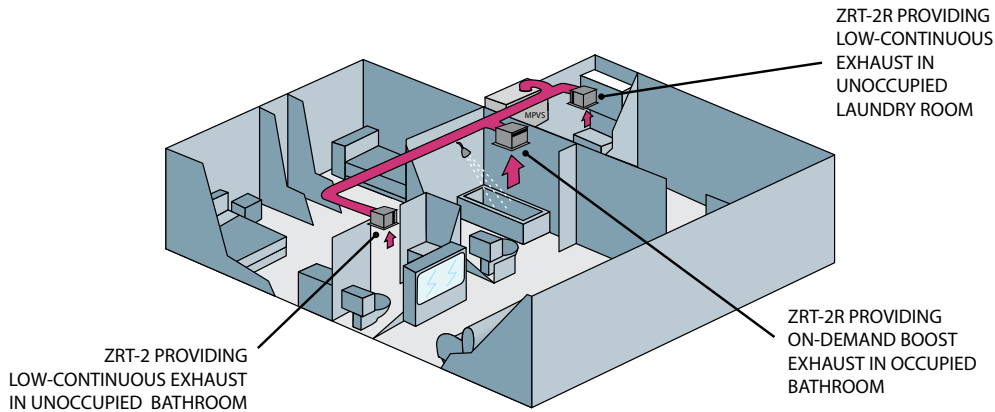
VentZone® Systems by ALDES offer dynamic zone control of ventilation system airflows. These ultra energy-efficient systems combine centralized bathroom exhaust and whole-house IAQ ventilation in a single highly effective and efficient kit. Perfectly suited for residential applications, VentZone® Systems combine model ZRT demand-controlled zone register terminals and optional ENERGY STAR certified MPVS multi-port ventilators (sold separately) to create the quietest, most energy-efficient ventilation systems on the market today.

Zone Register Terminals (ZRT®) replace individual fans or static grilles like those found on other remote fan kits. They control the fan so that areas are only ventilated as desired. Also known as demand-controlled ventilation, controlling the airflow on a zone-by-zone basis saves energy and reduces the load on heating and cooling systems.

## HOW IT WORKS

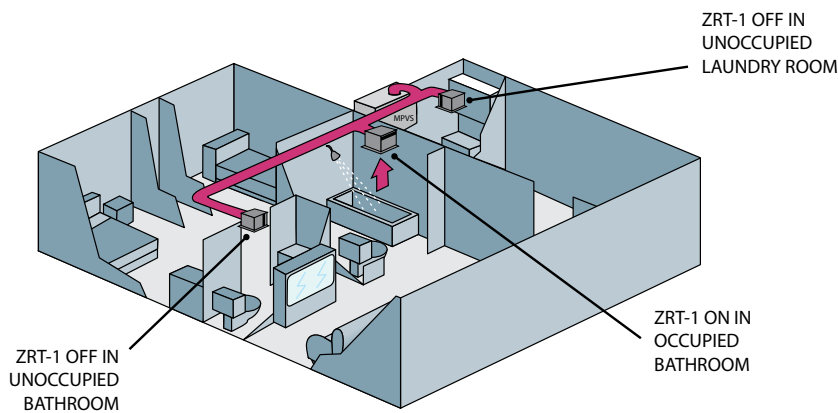
Each ZRT is a combination grille/register box, control damper, and optional Constant Airflow Regulators (CAR3®). The ZRT-1 is designed to provide zone-controlled spot ventilation. The ZRT-2 provides zone-controlled spot ventilation and continuous IAQ ventilation through the addition of a continuous (minimum) airflow regulator.

### VENTZONE® IAQ CONTINUOUS EXHAUST VENTILATION KITS






Using ZRT-2s to provide low-continuous IAQ ventilation and zone-based on-demand boost ventilation for homes with 2-4 bathrooms. This kit is designed to meet ASHRAE 62.2, ENERGY STAR with IAP, LEED for Homes, and California Title 24 standards. **\*Compatible with MPVS150 Ventilator; sold separately.**

### VENTZONE® VZ ZONED INTERMITTENT BATH EXHAUST KITS



Eliminate the need for multiple noisy, inefficient spot fans by consolidating everything into a single effective system. The kit contains an energy-ZRT-1s for zone-controlled spot ventilation. Air is only drawn from bathrooms in use. The kit can be used for homes with 2-5 bathrooms, and expansion kits are available. **\*Compatible with ZTC and MPVS150 Ventilator; sold separately.**

#### Accessory Kits Components

Number of Bathrooms	6" ZRT-1 or ZRT-2 (120 VAC)	4" ZRT-1 or ZRT-2 (120 VAC)	RECOMMENDED FAN Sold separately ENERGY STAR Certified* Ventilator
			
2	1	1	MPVS150
3	1	2	MPVS150
4	1	3	MPVS150

**VENTZONE® IAQ WITH HRV OR ERV**

- Combination of centralized zoned exhaust ventilation, whole house IAQ and heat and energy recovery make this system efficient and innovative.
- Homeowners benefit from healthy indoor air quality throughout the home with extra boost ventilation in bathrooms as needed.
- The entire ventilation system only requires two penetrations to the outside of the home, as opposed to one for each bathroom, plus two for the ERV with other systems.
- Compatible controllers are available to automate the system's response to changes in the indoor environment.
- The new and improved air exchanger models each feature an onboard 24V low-voltage power supply to power up to 5 zone register terminals. The entire system is designed for installation by a single trade in most cases. Check local codes.

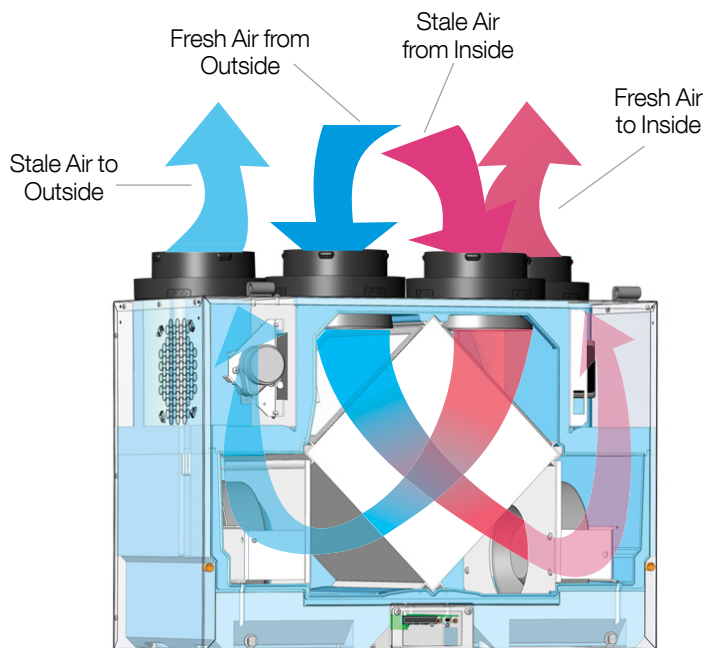
*VentZone® Systems and the patented Zone Register Terminals® (ZRT) have both earned the American Society of Heating, Refrigeration, Air Conditioning Engineers (ASHRAE) Innovation Award for ventilation.*

**HOW IT WORKS**

In the heating season, Heat Recovery Ventilators (HRV) and Energy Recovery Ventilators (ERV) draw in fresh air from outside. This air is distributed throughout the home by a dedicated-duct system or through the forced-air heating / air conditioning system. At the same time, vents located in moisture-and pollutant-producing rooms (e.g., kitchens, bathrooms, laundry rooms) exhaust an equal amount of stale, humid air to the outside. Sometimes air is drawn directly from the return air of a forced-air heating/air conditioning system.

As the two airstreams pass each other in the unit's core, the fresh air is tempered with heat recovered from the exhaust air. An ERV will also transfer moisture to the fresh air if this air is drier than the exhaust air, improving comfort in overly dry homes.

In the cooling season, the reverse occurs. Fresh outdoor air is cooled by the air-conditioned exhaust air. If the outgoing air is drier than the fresh air, the ERV will transfer moisture to the outgoing air. This process reduces the humidity load on the air conditioning system, which would otherwise result in the continuous introduction of humid summer air to the home.

**HEAT AND ENERGY ACCESSORY KIT TIMER AND CONTROL****20/40/60 Minute Timer (P/N 611228)**

- Activates the HRV/ERV to operate on high-speed mode for 20, 40, or 60 minutes
- Works with Digital Multifunction Control (P/N 611242)
- 24 VAC AND Fits inside 2" x 4" service box
- Includes retaining screws and white Decora™-style faceplate

**Digital Multifunction Control (P/N 611242)**






- Complete control over HRV/ERV:
  - » Dehumidistat mode
  - » ECO Mode (low-speed air exchange for 20 minutes of every hour)
  - » High Occupancy Mode (high-speed air exchange for 1, 2, or 4 hours when more people are in the space)
  - » Air exchanger maintenance indicator and Relative humidity display
- 1" x 1" Liquid-crystal display AND Blue LED backlight (configurable as a nightlight)
- 24 VAC AND Fits inside 2" x 4" service box
- Includes retaining screws and white Decora™-style faceplate

# VENTZONE® SYSTEMS






## HEAT AND ENERGY RECOVERY VENTILATORS KITS

7

### VentZone® Zoned IAQ Kits with Heat Recovery

Number of Bathrooms	Airflow @ 0.2 in. w.g.	Ventilator	6" ZRT-2-6-24R (24V) 10/20/30 CFM	4" ZRT-2-4-24R (24V) 10/20/30 CFM	4" ZRT-1-4-24R (24V)	20/40/60 Push Button Timer
						
2	140 CFM	H150-TQG or H150-TRG	--	2	--	2
2	140 CFM	H150-TQG or H150-TRG	--	2	--	2
2.5	140 CFM	H150-TQG or H150-TRG	--	2	1	3
2.5	220 CFM	H190-TQG or H190-TRG	1	1	1	2
3	220 CFM	H190-TQG or H190-TRG	1	2	--	3
3.5	220 CFM	H190-TQG or H190-TRG	1	2	1	4
4.5	220 CFM	H190-TQG or H190-TRG	1	3	1	5
5	220 CFM	H190-TQG or H190-TRG	1	4	--	5

### VentZone® Zoned IAQ Kits with Energy Recovery

Number of Bathrooms	Airflow @ 0.2 in. w.g.	Ventilator	6" ZRT-2-6-24R (24V) 10/20/30 CFM	4" ZRT-2-4-24R (24V) 10/20/30 CFM	4" ZRT-1-4-24R (24V)	20/40/60 Push Button Timer
						
2	125 CFM	E150-TRG	--	2	--	2
2.5	125 CFM	E150-TRG	--	2	1	3
2.5	191 CFM	E190-TRG	1	1	1	2
3	191 CFM	E190-TRG	1	2	--	3
3.5	191 CFM	E190-TRG	1	2	1	4
4.5	191 CFM	E190-TRG	1	3	1	5
5	191 CFM	E190-TRG	1	4	--	5

### Accessories for E/HRV VentZone® Kits

Part Number	Description	ZRT-1-6-24R	Digital Multifunction Wall Control
			
R39 550-24	ZRT and multi-function wall control	1	1



# ZRT-R

## ZONE REGISTER TERMINALS

### AIRFLOW & ZONE CONTROL

**Made in  
USA**

**WARRANTY  
3 YEARS**

**Patent  
pending**



## Product Description

Aldes patented Zone Register Terminal (ZRT-R)\* are designed to introduce flexibility and demand control to central ventilation systems. The multi-zone ZRT® regulates ventilation without need for individual fans. Each ZRT-R is a combination grille, register box, control damper, and optional flow regulator(s). This unique combination provides up to four different control schemes without the need for expensive pneumatic, electronic, or DDC control systems. To ensure the proper calibration of the damper assembly, do not exceed 1.0 in. w.g. (250 Pa) of differential pressure across the damper door.

When used in central systems, the ZRT-1 model provides on-off control for on-demand ventilation. This allows fan downsizing and promotes energy savings by minimizing necessary fan horsepower and ventilation-induced heating and cooling loads on the building. The optional Constant Airflow Regulator (CAR3) can be installed in the ZRT-1's extended duct collar to place a maximum flow limit on each terminal when activated. The automatic operation of the CAR3 will provide precise balancing to each terminal, compensating for intermittent use of other ZRTs around the building, as well as factors like stack-effect.

The ZRT-2 model is used for combination low-flow continuous indoor air quality ventilation and on-demand high-flow spot ventilation using the same central fan system. This is achieved by integrating a minimum Constant Airflow Regulator (CAR3) directly into the damper assembly. When the ZRT-2 is powered on, the control damper powers open, bypassing the low-flow CAR3 to allow the boost ventilation rate set by the maximum flow CAR3 (when equipped).

## Construction

- Gasketed damper blade ensures a tight seal preventing unwanted air leakage and noise in closed position.
- Constructed of 24-gauge galvanized steel housing for durability.
- 24 VAC, 120 VAC, or 230 VAC actuator motor with spring return damper assembly.
- Painted white extruded aluminum grille; blades fixed at 38°.
- Optional CAR3 constant airflow regulator.

## Warranty

The entire unit is guaranteed for 3 years, from date of shipment, against all manufacturing defects, provided the material has been installed & operated per manufacturer's instructions & under normal conditions. Warranty is limited to the repair or replacement of the material upon its return freight paid to our factory. This warranty is not transferable & limited to the original end user.

## Maintenance

The ZRT-R needs no maintenance when used in normal conditions. If the intended application includes air heavily loaded with grease or dust, access to all components of the assembly is through the removable grille for cleaning.



## How to Specify Aldes: ZRT-R

**Step 1:** Reference the model code below and performance details within this specifications sheet to select the appropriate ZRT-R.

**Step 2:** Determine the **SERIES** required for your specific project.

**NOTE:** The ZRT is available with or without a minimum flow option for application requiring low volume continuous airflows. The minimum flow control equips a CAR3 to provide a balanced minimum airflow rate. Factory calibration of the minimum flow CAR3 is available on request.

**Step 3:** Select the required **SIZE**.

**Step 4:** Select the required motor based on available **POWER**.

**Step 5:** If equipped, select the **MAXIMUM FLOW CONTROL**.

## Model Code Example

**ZRT-R-2-4-24**

**PARENT MODEL**

Zone Register Terminal

**APPLICATION**

R: Exhaust

**SERIES**

- 1: No Minimum Flow Control
- 2: With Minimum Flow Control

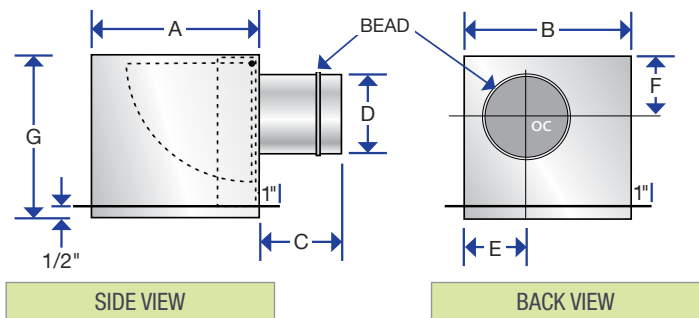
**SIZE**

- 4: 8" x 8" Grille w/ 4" collar
- 6: 10" x 10" Grille w/ 6" collar

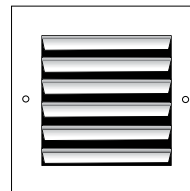
**POWER**

- 24: 24 V/60Hz
- 120: 120 V/60Hz
- 230: 230 V/50Hz

## ZRT-R Dimensions



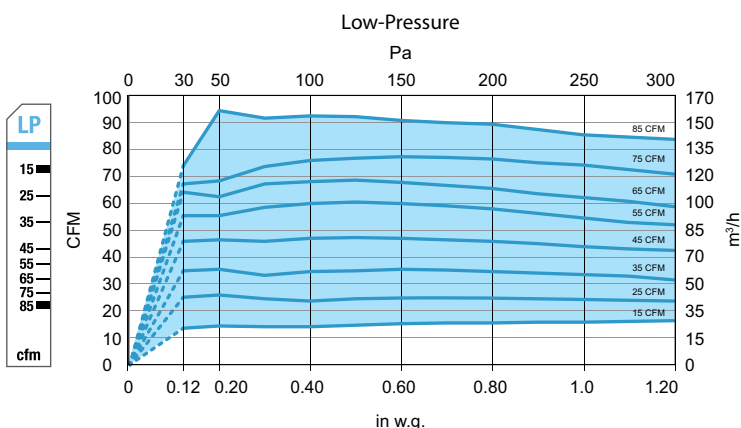
Size	A	B	C	D	E	F	G
4" (100 mm)	8" (203 mm)	8" (203 mm)	4-1/2" (114 mm)	3-7/8" (98 mm)	2-1/2" (64 mm)	3-1/2" (89 mm)	7" (177 mm)
6" (150 mm)	10" (254 mm)	10" (254 mm)	5-1/2" (140 mm)	5-7/8" (149 mm)	3-1/2" (89 mm)	4-1/2" (114 mm)	8-1/2" (216 mm)



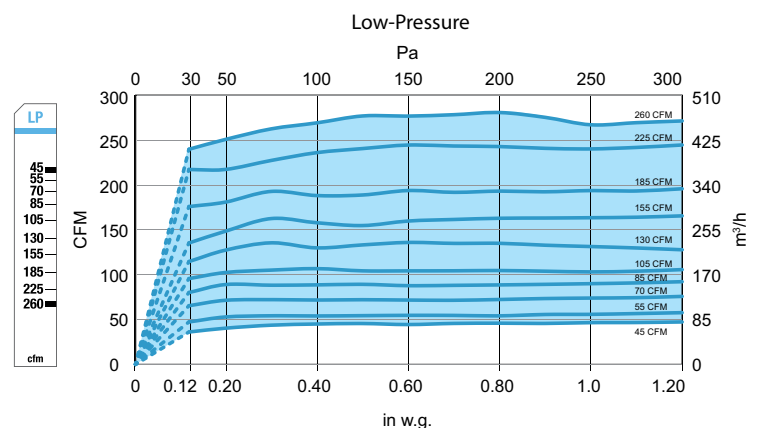
**EXHAUST GRILLE**

*Optional Finishes: anodized or black.  
Contact Aldes representatives for additional colors.*

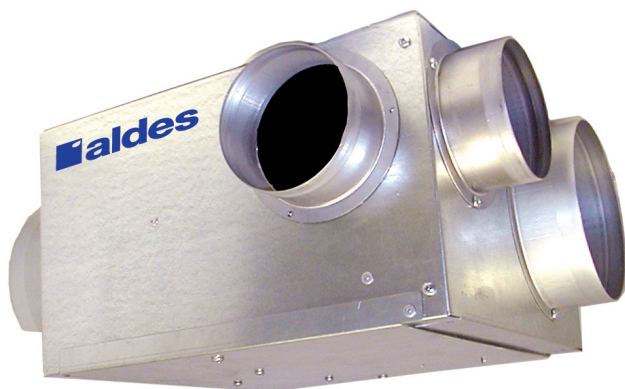
### ZRT with CAR3 4" DIAMETER (100 mm)



### ZRT with CAR3 6" DIAMETER (150 mm)



Airflow measurements taken at 68°F (20°C) at 1 atmosphere pressure.



## MPVS150

### MULTI-PORT EXHAUST VENTILATORS

#### VENTERGY® SERIES FANS



## Product Description

Ventergy® Series Multi-Port Ventilators (MPVS) are highly versatile, continuous-duty rated fan units for residential and light commercial applications. They meet ENERGY STAR efficiency criteria for low energy consumption. The most popular use for the fan is central exhaust ventilation of bathrooms, kitchens, laundry rooms, and other rooms where humidity is a controlling factor since the fan has a single exhaust discharge duct directly to the outdoors.

The principal advantage of the MPVS is the elimination of standard noisy bath fans, with the benefits of quiet operation and reduced penetrations to the exterior of the building. With the increasingly tight construction of energy-efficient buildings, there is a growing need for mechanical ventilation for indoor air quality. These fans are designed to serve this purpose by providing effective bathroom ventilation with the ability to run intermittently or continuously. The quiet, energy-efficient, permanent-split-capacitor type of external-rotor motor has permanently sealed bearings that provide many years of maintenance-free performance.

## Construction

The MPVS is constructed of heavy-gauge galvanized steel to prevent corrosion caused by moisture. The cabinet is internally lined with acoustic, closed-cell foam insulation that acts as a vapor barrier. This allows installation directly above living spaces or in unheated plenum spaces without concern for noise or condensation.

## Controls

The fans can be operated manually or automatically by a programmable timer or dehumidistat. They may also be operated in conjunction with a variable speed control.

## Fan and Motor

The fan motor is an energy-efficient, permanent-split-capacitor type of external-rotor design. Totally sealed to protect against moisture and contaminants, it is approved for removing steam and moisture from kitchen and bath areas. The motor incorporates permanently lubricated and sealed bearings and automatic-reset thermal-overload protection. It is designed and certified for continuous duty or intermittent operation.

The fan uses a backward-inclined impeller design that prevents dust from collecting on the blades. Each fan is statically and dynamically balanced in the factory to eliminate vibration and ensure quiet operation. The entire motor and fan assembly is mounted on a drop-down hinged access panel for simple service and inspection, and it can be removed from the fan without disassembling the duct connections.

## Locating and Installing

The compact dimensions and versatile mounting options permit installation above drop ceilings, between ceiling joists, or within a small soffit location. They can be installed horizontally or vertically.

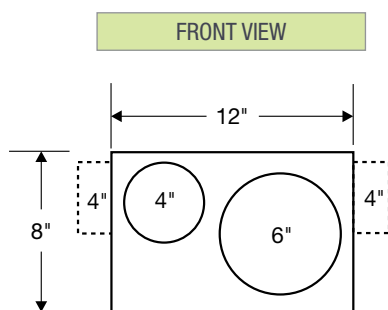
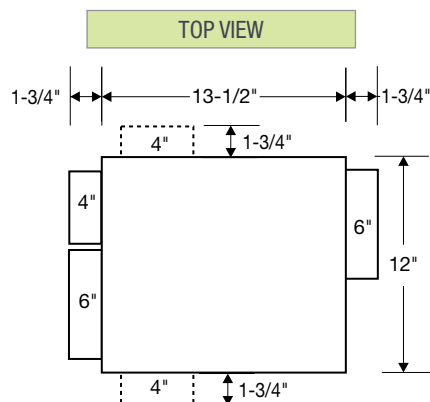
## Accessories

Accessory kits are available to facilitate installation and enhance operation. Accessories kits are sold separately. Please visit [aldes-na.com](http://aldes-na.com), or contact your local Aldes distributor for details.

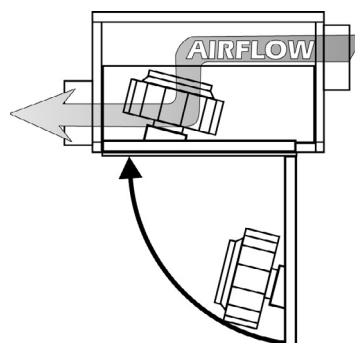
## Performance

Fan airflow and energy performance shall be tested in accordance with HVI procedures.

## Dimensions & Performance



NOTE: Location(s) of field-installed 4" side-tap collar(s) shown as dashed lines.



ELECTRICAL AND AIRFLOW PERFORMANCE*											
Model	Watts at 0.2" Ps	CFM vs. Static Pressure									ENERGY STAR Certified
		0"	0.2"	0.4"	0.6"	0.8"	1.0"	1.2"	1.4"	1.6"	
MPVS150	39.9	212	170	133	101	71	49	17	--	--	✓

\*Certified airflow rating at 0.2" w.g. is derated from actual test results per HVI Certification procedure 920. The HVI Certified Rate for MPVS150 = 170 CFM, MPVS200 = 250 CFM.

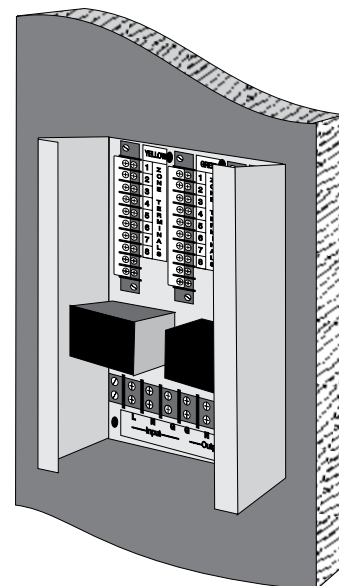
### ELECTRICAL DATA

MPVS150: 115 V, 60 Hz, 41 W, 0.34 A, 2200 RPM  
MPVS200: 115 V, 60 Hz, 59 W, 0.53 A, 2960 RPM

*Above ratings are intended for sizing electrical wiring only.  
Actual consumption will be lower.*

## ZONE TERMINAL AND FAN CONTROL CENTER (ZTC)

Upgrade the VentZone® VZ Zoned Intermittent Bath Exhaust System with a Zone Terminal and Fan Control Center (ZTC). The ZTC provides 24V power for up to (8) 24V ZRTs, simplifying the installation by significantly reducing the amount of line voltage wire being run throughout the dwelling. When ZRT is activated by a local switch, a relay in the ZTC will close to power the MPVS fan. To order, add the ZTC Upgrade Kit to any standard VentZone® order, and all ZRTs will be converted to 24V units instead of the standard 120V.







## E150-TRG

### ENERGY RECOVERY VENTILATOR

125 CFM at 2.0 in w.g. (ESP)



UNIT



CORE



CANADA



C22.2  
no113  
UL 1812

## Product Description

Compact size, large performance – the E150-TRG energy recovery ventilator produces approximately **125 CFM** at 0.20 in.w.g (ESP) and recovers sensible and latent heat through its high-latent-transfer membrane core. The E150-TRG has been thoughtfully engineered for simple installation in apartments, condos, and small houses. The removable collars are top-mounted, which makes the unit both narrow and shallow enough to fit inside standard closets and other tight spaces.

The E150-TRG with FLEXControl, airflow circuits can be calibrated electronically, eliminating the need for resistance-inducing balancing dampers and improving overall efficiency.

### KEY FEATURES

Electronically and independently adjustable supply and exhaust blowers (FLEXControl)

Gauge ports on the door for fast and reliable airflow readings

Durable HLT core with exceptional moisture transfer for more comfort and no drain required

Non-dust-loading backward-inclined impellers on totally enclosed motors

Twist-in collars for easy flex-duct attachment

Easy access to core and filters for cleaning

Multiple low-voltage controller options

Recirculation defrost collar snaps into pre-punched area of cabinet for ducting flexibility



### Recovery Core

Material: High-latent-transfer membrane

### Casing

Material: Pre-painted 24-gauge galvanized steel

Duct Connections: Ø 5" (Ø 127 mm)

Insulation: Molded EPS

Width: 23-1/8" (587 mm)

Height: 16-3/4" (425 mm)

Depth: 12-3/8" (314 mm)

Weight: 32 lbs (15 kg); Shipping Weight: 40 lbs (18 kg)

Supply Damper: Motorized



### Mounting

Suspended by chains with vibration-isolating springs  
Wall-mounting accessory available (P/N 608575)



### Electrical requirement

120 VAC, 60Hz, 1.3A, 156W

Cord Set: 48" (1219 mm) with ground



### Frost control

Automatic timed recirculation, fifth port

Cycles controlled by a temperature sensor when the outdoor temperature drops below 14°F (-10°C)



### Filters

Type : Two MERV6 filters (P/N 612409)

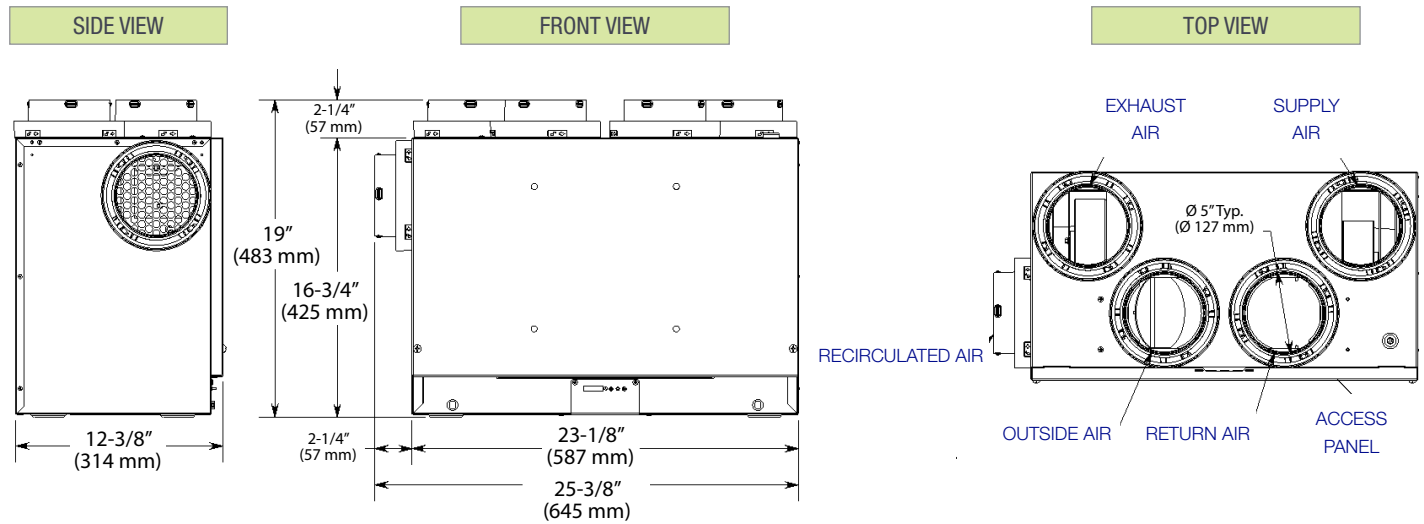
Option : Two MERV13 filters (P/N 612410)



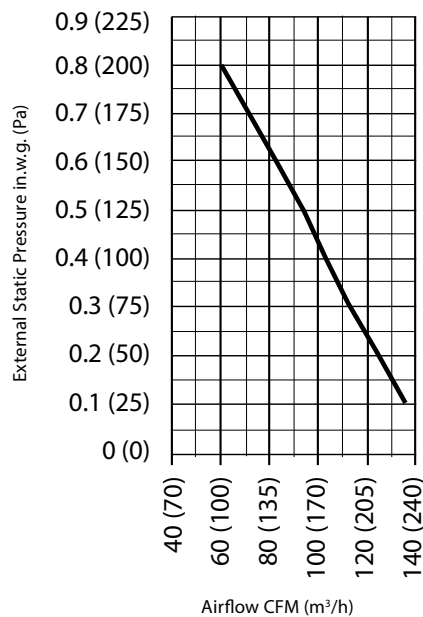
### Blowers

Motorized impellers (backward-inclined)

## Dimensions & Performance



### E150-TRG Ventilation Performance



Supply Temperature		Net Airflow		Power Consumed (W)	Sensible Recovery Efficiency	Adjusted Sensible Recovery Efficiency	Latent Recovery/ Moisture Transfer	Total Recovery Efficiency
°F	°C	CFM	L/s					
Heating								
32	0	51	24	42	68%	73%	57%	--
32	0	62	29	62	66%	72%	55%	--
32	0	103	49	98	58%	64%	45%	--
-13	-25	50	24	64	61%	64%	55%	--
Cooling								
95	35	49	23	42	--	--	45%	52%



## H150-TQG

### HEAT RECOVERY VENTILATOR

140 CFM at 2.0 in w.g. (ESP)



UNIT



CORE



CANADA



C22.2  
no113  
UL 1812

## Product Description

The H150-TQG has been thoughtfully engineered for simple installation in apartments, condos, and small houses. The removable collars are top-mounted, which makes the unit both narrow and shallow enough to fit inside standard closets and other tight spaces.



### Recovery Core

Material: Polypropylene

### Casing

Material: Pre-painted 24-gauge galvanized steel  
 Drain Connection: Ø 3/8" (Ø 10 mm)  
 Duct Connections: Ø 5" (Ø 127 mm)  
 Insulation: Molded EPS  
 Width: 23-1/8" (587 mm)  
 Height: 16-3/4" (425 mm)  
 Depth: 12-3/8" (314 mm)  
 Weight: 32 lbs (15 kg); Shipping Weight: 40 lbs (18 kg)  
 Supply Damper: Motorized



### Mounting

Suspended by chains with vibration-isolating springs  
 Wall-mounting accessory available (P/N 608575)



### Electrical requirement

120 VAC, 60Hz, 1.3A, 156W  
 Cord Set: 48" (1219 mm) with ground



### Frost control

Automatic timed recirculation, four port  
 Cycles controlled by a temperature sensor when the outdoor temperature drops below 23°F (-5°C)



### Filters

Type : Two MERV6 filters (P/N 612409)  
 Option : Two MERV13 filters (P/N 612410)



### Blowers

Motorized impellers (backward-inclined)

## KEY FEATURES

Electronically and independently adjustable supply and exhaust blowers (FLEXControl)

Gauge ports on the door for fast and reliable airflow readings

Non-dust-loading backward-inclined impellers on totally enclosed motors

Twist-in collars for easy flex-duct attachment

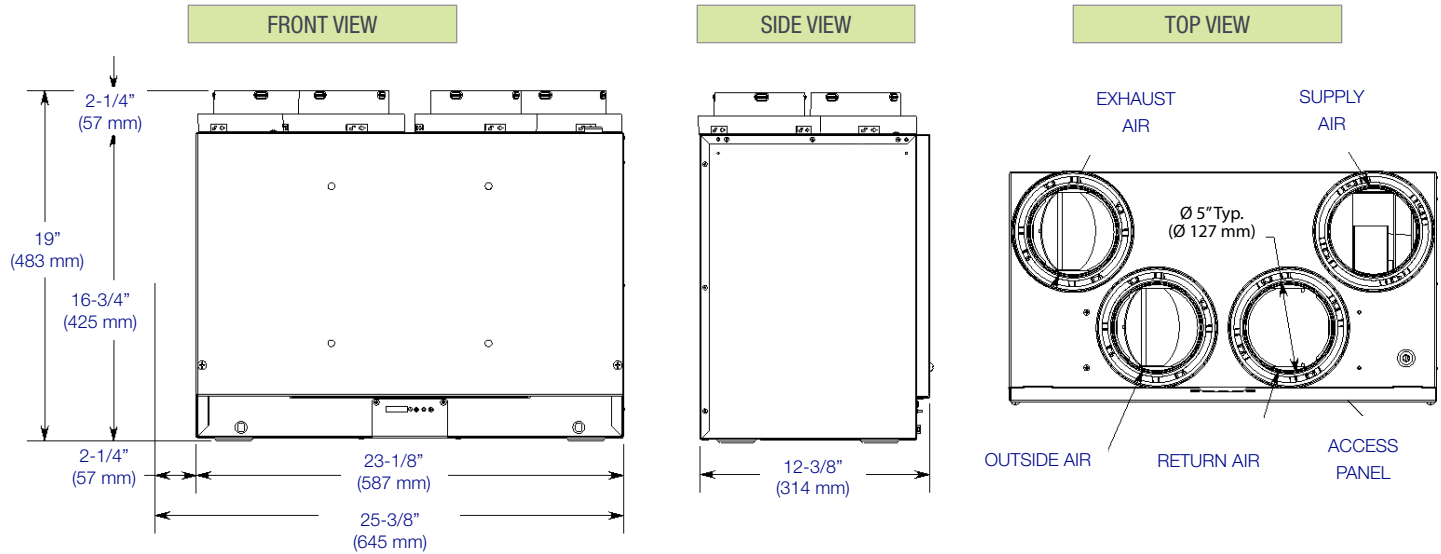
Easy access to core and filters for cleaning

Extremely durable polypropylene core

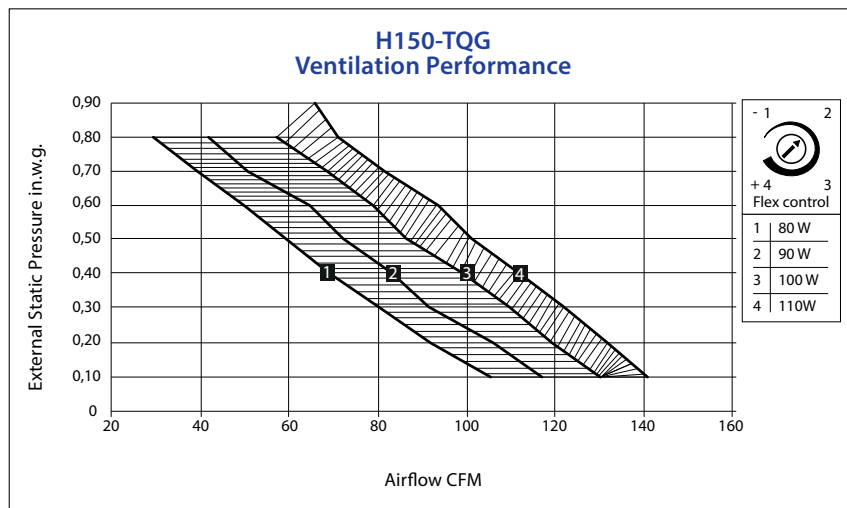
Recirculation defrost to maintain a neutral pressure in the home, and using only the four duct connections. No fifth duct connection required



## Dimensions & Performance



Supply Temperature		Net Airflow		Power Consumed (W)	Sensible Recovery Efficiency	Adjusted Sensible Recovery Efficiency
°F	°C	CFM	L/s			
32	0	53	25	44	67%	73%
32	0	66	31	48	65%	70%
32	0	100	47	88	59%	65%
-13	-25	66	31	72	60%	63%





## H150-TRG

### HEAT RECOVERY VENTILATOR

142 CFM at 2.0 in w.g. (ESP)



UNIT



CORE



CANADA



C22.2  
no113  
UL 1812

## Product Description

Compact size, large performance – the H150-TRG heat recovery ventilator produces approximately **142 CFM** at 0.20 in.w.g (ESP) and recovers heat through its high-efficiency polypropylene core. The H150-TRG has been thoughtfully engineered for simple installation in apartments, condos, and small houses. The removable collars are top-mounted, which makes the unit both narrow and shallow enough to fit inside standard closets and other tight spaces.

The H150-TRG with FLEXControl, airflow circuits can be calibrated electronically, eliminating the need for resistance-inducing balancing dampers and improving overall efficiency.



### Recovery Core

Material: Polypropylene

### Casing

Material: Pre-painted 24-gauge galvanized steel  
 Drain Connection: Ø 3/8" (Ø 10 mm)  
 Duct Connections: Ø 5" (Ø 127 mm)  
 Insulation: Molded EPS  
 Width: 23-1/8" (587 mm)  
 Height: 16-3/4" (425 mm)  
 Depth: 12-3/8" (314 mm)  
 Weight: 32 lbs (15 kg); Shipping Weight: 40 lbs (18 kg)  
 Supply Damper: Motorized



### Mounting

Suspended by chains with vibration-isolating springs  
 Wall-mounting accessory available (P/N 608575)



### Electrical requirement

120 VAC, 60Hz, 1.3A, 156W  
 Cord Set: 48" (1219 mm) with ground



### Frost control

Automatic timed recirculation, fifth port  
 Cycles controlled by a temperature sensor when the outdoor temperature drops below 23°F (-5°C)



### Filters

Type : Two MERV6 filters (P/N 612409)  
 Option : Two MERV13 filters (P/N 612410)



### Blowers

Motorized impellers (backward-inclined)

## KEY FEATURES

Gauge ports on the door for fast and reliable airflow readings

Snap-out motor decks

Non-dust-loading backward-inclined impellers on totally enclosed motors

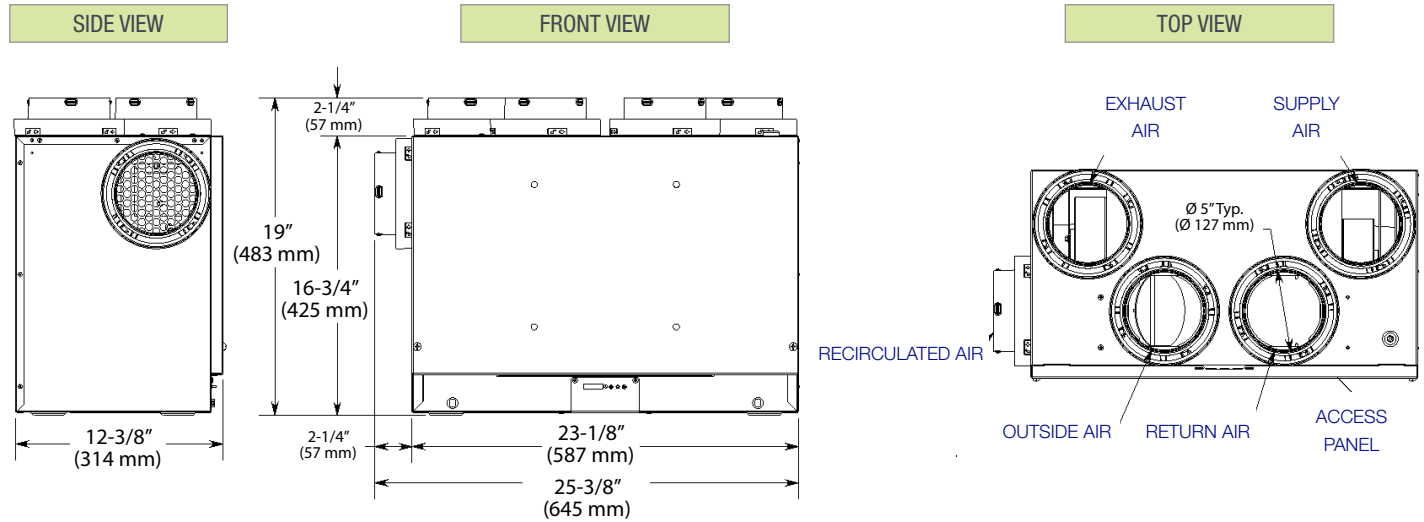
Twist-in collars for easy flex-duct attachment

Easy access to core and filters for cleaning

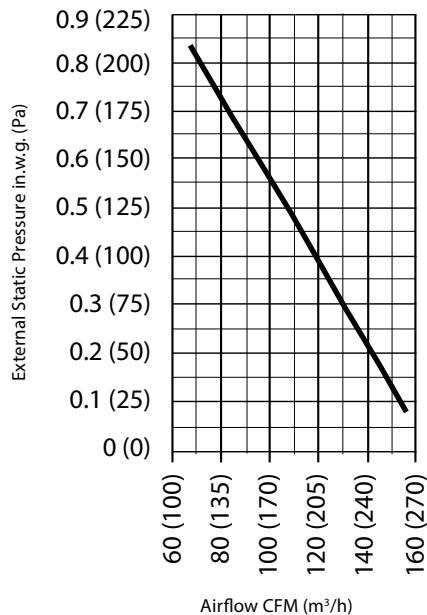
Extremely durable polypropylene core

Recirculation defrost collar snaps into pre-punched area of cabinet for ducting flexibility

## Dimensions & Performance



**H150-TRG**  
**Ventilation Performance**



Supply Temperature		Net Airflow		Power Consumed (W)	Sensible Recovery Efficiency	Apparent Sensible Effectiveness
°F	°C	CFM	L/s			
32	0	52	25	44	67%	76%
32	0	64	30	46	65%	72%
32	0	99	47	110	56%	66%
-13	-25	68	32	73	63%	78%





## E190-TRG

### ENERGY RECOVERY VENTILATOR

165 CFM at 4.0 in w.g. (ESP)



C22.2  
no113  
UL 1812

## Product Description

Compact size, large performance – the E190-TRG energy recovery ventilator produces approximately **165 CFM** at 0.4 in w.g. (ESP) and recovers sensible and latent heat through its high-latent-transfer core. The E190-TRG has been thoughtfully engineered for simple installation in small businesses and spacious houses.

The E190-TRG with FLEXControl, airflow circuits can be calibrated electronically, eliminating the need for resistance-inducing balancing dampers and improving overall efficiency.



### Recovery Core

Material: High-latent-transfer enthalpy

### Casing

Material: Pre-painted 24-gauge galvanized steel  
Duct Connections: Ø 6" (Ø 152 mm)  
Insulation: 1" (25 mm) Fiberglass with FSK  
Width: 29 3/16" (745 mm)  
Height: 21" (533 mm)  
Depth: 15 1/8" (398 mm)  
Weight: 46 lbs (23 kg); Shipping Weight: 51 lbs (25 kg)  
Supply Damper: Motorized; Exhaust Damper: Gravity



### Mounting

Suspended by chains with vibration-isolating springs  
Wall-mounting accessory available (P/N 608575)



### Electrical requirement

120 VAC, 60 Hz, 1.8 A, 216 W  
Cord Set: 48" (1219 mm) with ground



### Frost control

Automatic timed recirculation, fifth port  
Cycles controlled by a temperature sensor when the outdoor temperature drops below 14°F (-10°C)



### Filters

Type : Aluminum (P/N 683959)  
Option : Carbon (P/N 683956), MERV 6 (P/N 612408) or high-efficiency MERV 13 (P/N 683957)



### Blowers

Motorized impellers (backward-inclined)

### KEY FEATURES

Electronically and independently adjustable supply and exhaust blowers (FLEXControl)

Gauge ports on the door for fast and reliable airflow readings

Removable top-mounted collars

Non-dust-loading backward-inclined impellers on totally enclosed motors

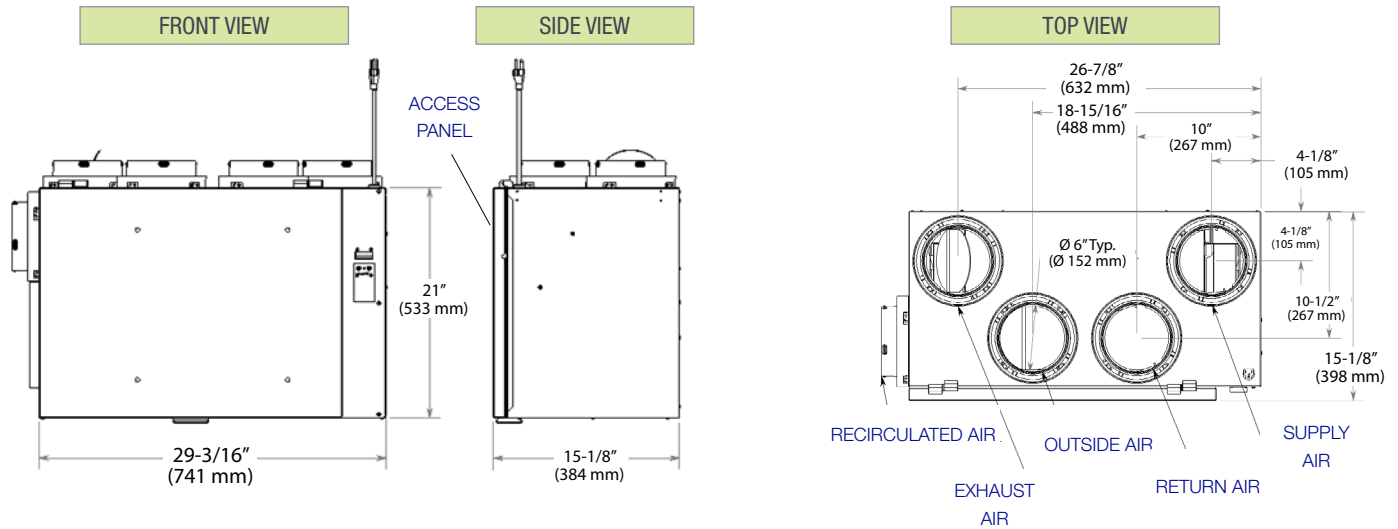
Twist-in collars for easy flex-duct attachment

Easy access to core and filters for cleaning

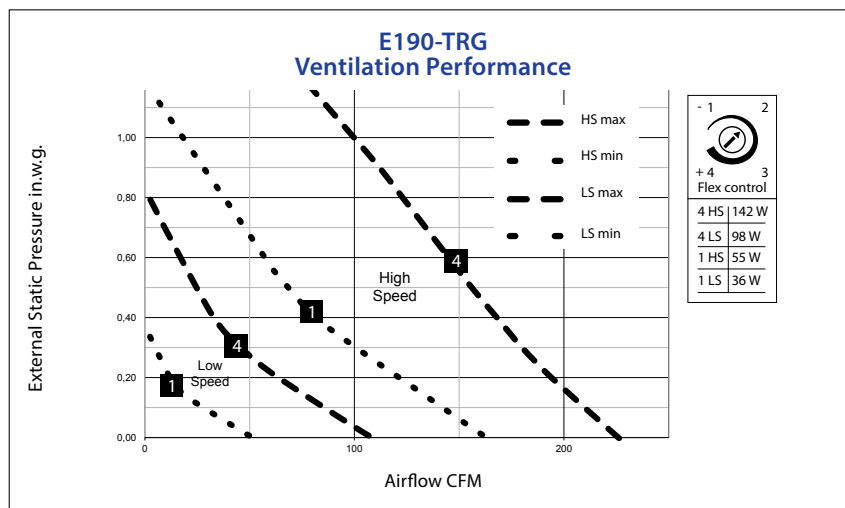
Multiple low-voltage controller options

Recirculation defrost collar snaps into pre-punched area of cabinet for ducting flexibility

## Dimensions & Performance



Supply Temperature		Net Airflow		Power Consumed (W)	Sensible Recovery Efficiency	Apparent Sensible Effectiveness	Latent Recovery/ Moisture Transfer	Total Recovery Efficiency
°F	°C	CFM	L/s					
Heating								
32	0	51	24	52	76%	84%	69%	--
32	0	81	38	62	72%	78%	66%	--
32	0	119	56	106	67%	67%	60%	--
-13	-25	74	35	89	60%	63%	63%	--
Cooling								
95	35	81	38	62	--	--	0.55	56%





## H190-TQG

### HEAT RECOVERY VENTILATOR

198 CFM at 4.0 in w.g. (ESP)



UNIT



CORE



CANADA



C22.2  
no113  
UL 1812

## Product Description

Compact size, large performance. The H190-TQG heat recovery ventilator exchanges up to **198 CFM** of fresh air at 0.4 in.w.g. (ESP) and recovers heat through its high-efficiency polypropylene core. The H190-TQG has been thoughtfully engineered for simple installation in almost any size of house.



### Recovery Core

Material: Polypropylene

### Casing

Material: Pre-painted 24-gauge galvanized steel  
 Drain Connection: Ø 3/8" (Ø 10 mm)  
 Duct Connections: Ø 6" (Ø 152 mm)  
 Insulation: Molded EPS  
 Width: 29-3/16" (741 mm)  
 Height: 21" (533 mm)  
 Depth: 15-1/8" (384 mm)  
 Weight: 46 lbs (21 kg); Shipping Weight: 51 lbs (23 kg)  
 Motorized Exhaust Damper: Gravity



### Mounting

Suspended by chains with vibration-isolating springs  
 Wall-mounting accessory available (P/N 608575)



### Electrical requirement

120 VAC, 60 Hz, 1.95 A, 155 W  
 Cord Set: 48" (1219 mm) with ground



### Frost control

Automatic timed recirculation. Cycles controlled by a temperature sensor when outdoor temperature drops below 23°F (-5°C)



### Filters

Type : Aluminum (P/N 683959)  
 Option : Carbon (P/N 683956), MERV 6 (P/N 683958) or high-efficiency MERV 13 (P/N 683957)



### Blowers

Motorized impellers (backward-inclined)

## KEY FEATURES

Electronically and independently adjustable supply and exhaust blowers (FLEXControl)

Gauge ports on the door for fast and reliable airflow readings

Non-dust-loading backward-inclined impellers on totally enclosed motors

Twist-in collars for easy flex-duct attachment

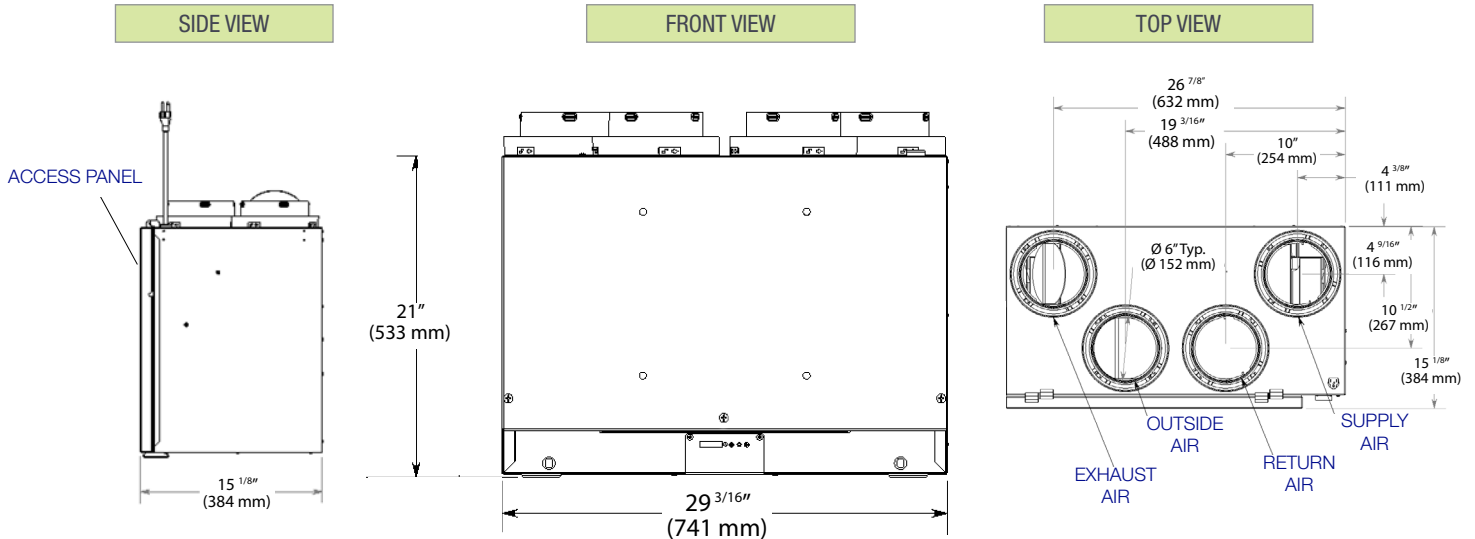
Easy access to core and filters for cleaning

Extremely durable polypropylene core

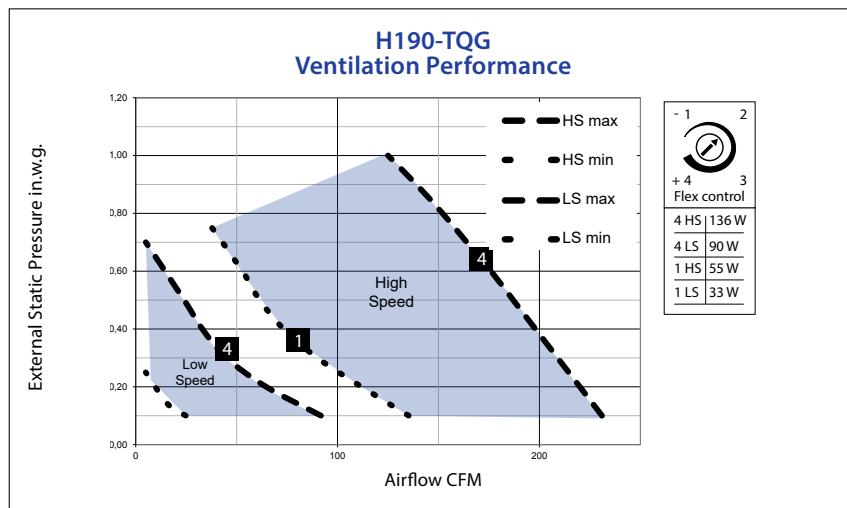
Recirculation defrost to maintain a neutral pressure in the home, and using only the four duct connections. No fifth duct connection required



## Dimensions & Performance



Supply Temperature		Net Airflow		Power Consumed (W)	Sensible Recovery Efficiency	Adjusted Sensible Recovery Efficiency
°F	°C	CFM	L/s			
32	0	64	30	60	75%	82%
32	0	80	38	66	73%	79%
32	0	121	57	116	68%	74%
-13	-25	68	32	91	67%	71%





## H190-TRG

### HEAT RECOVERY VENTILATOR

130 - 200 CFM at 4.0 in w.g. (ESP)



UNIT

CORE

CANADA

C22.2  
no113  
UL 1812

## Product Description

Compact size, large performance – the H190-TRG heat recovery ventilator **exchanges 130 to 200 CFM at 0.4 in.w.g** (ESP) and recovers heat through its high-efficiency polypropylene core. The H190-TRG has been thoughtfully engineered for simple installation in almost any size home.

The H190-TRG with FLEXControl, airflow circuits can be calibrated electronically, eliminating the need for resistance-inducing balancing dampers and improving overall efficiency.



### Recovery Core

Material: Polypropylene

### Casing

Material: Pre-painted 24-gauge galvanized steel  
 Drain Connection: Ø 3/8" (Ø 10 mm)  
 Duct Connections: Ø 6" (Ø 152 mm)  
 Insulation: 1» Fiberglass with FSK  
 Width: 29-3/16" (749 mm)  
 Height: 21' (533 mm)  
 Depth: 15-1/8" (387 mm)  
 Weight: 50 lbs (22 kg); Shipping Weight: 51 lbs (23 kg)  
 Supply Damper: Motorized; Exhaust Damper: Gravity



### Mounting

Suspended by chains with vibration-isolating springs  
 Wall-mounting accessory available (P/N 608575)



### Electrical requirement

120 VAC, 60Hz, 1.8A, 216W  
 Cord Set: 48" (1219 mm) with ground



### Frost control

Automatic timed recirculation, fifth port  
 Cycles controlled by a temperature sensor when the outdoor temperature drops below 23°F (-5°C)



### Filters

Type : Aluminum (P/N 683959)  
 Option : Carbon (P/N 683956), MERV 6 (P/N 683958) or high-efficiency MERV 13 (P/N 683957)



### Blowers

Motorized impellers (backward-inclined)

### KEY FEATURES

Electronically and independently adjustable supply and exhaust blowers (FLEXControl)

Gauge ports on the door for fast and reliable airflow readings

Removable top-mounted collars

Non-dust-loading backward-inclined impellers on totally enclosed motors

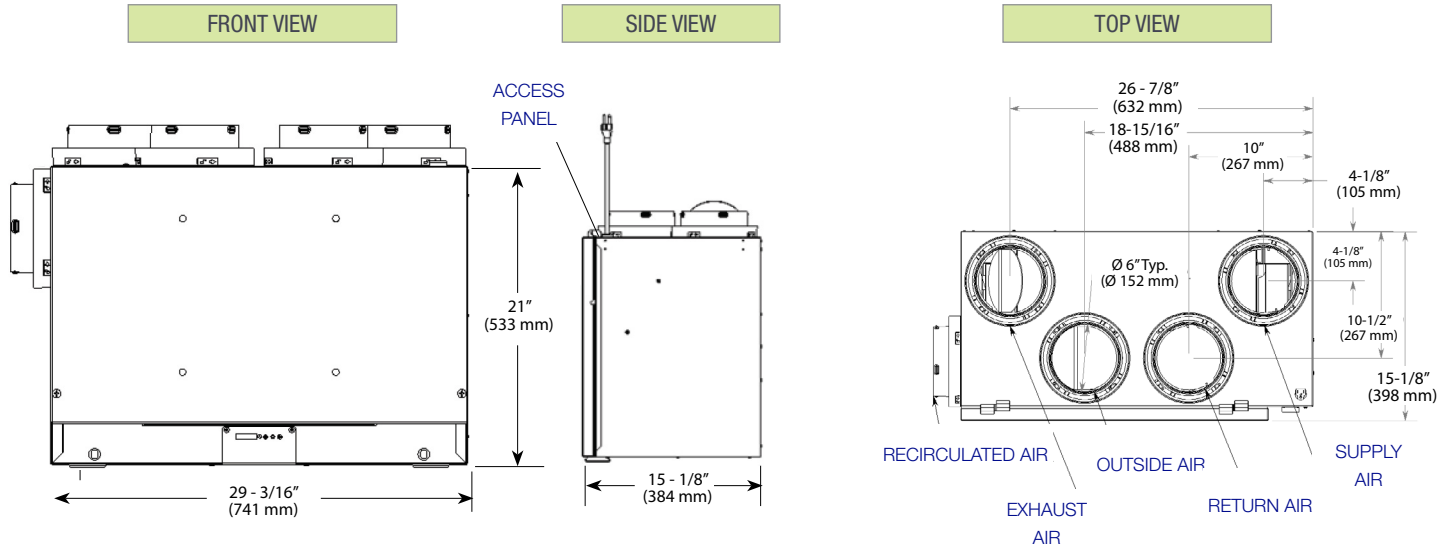
Twist-in collars for easy flex-duct attachment

Easy access to core and filters for cleaning

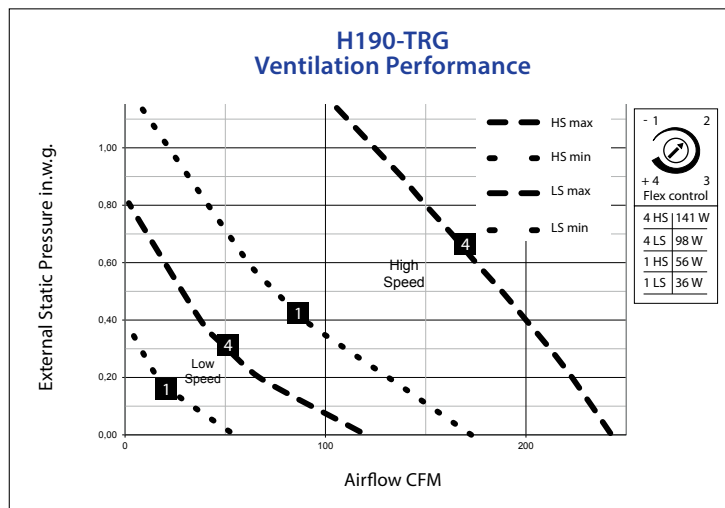
Extremely durable polypropylene core

Recirculation defrost to maintain neutral pressure in the home, and using only the four duct connections. No fifth duct connection required

## Dimensions & Performance



Supply Temperature		Net Airflow		Power Consumed (W)	Sensible Recovery Efficiency	Apparent Sensible Effectiveness
°F	°C	CFM	L/s			
32	0	64	30	60	75%	82%
32	0	81	38	66	73%	80%
32	0	121	57	116	68%	75%
-13	-25	68	32	91	67%	70%







For more information, contact your  
Aldes sales advisor, visit [aldes-na.com](http://aldes-na.com),  
or find us on



Aldes North America  
USA 800.255.7749 CAN 800.262.0916

