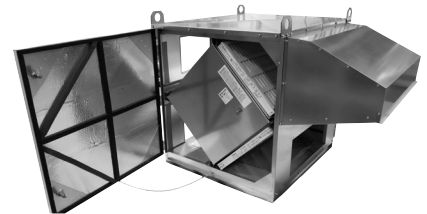
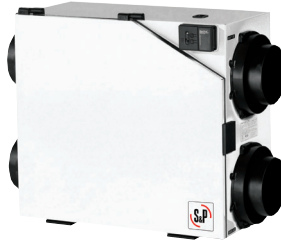




# Energy and Heat Recovery Ventilators



TR • TRC • CRT • HR

*Advancing Ventilation®*



### **MODEL FEATURES**

- Polypropylene HRV core
- 3 operating modes
- Painted galvanized steel case
- Designed for simple installation by a single person
- Fully insulated case
- **Limited lifetime warranty** on the heat recovery core
- 5-year warranty on balance of unit

### **MODEL OVERVIEW**

The JencoFan HR Series heat recovery ventilators (HRVs) are ideal for use in cold climates where home heating is essential. The HR Series uses one motor to exhaust stale room air and another motor to bring fresh outdoor air back into the house. The technology of a plate heat recovery core is that it transfers warm ambient air from one airstream to the other without mixing the air streams for maximum efficiency and comfort.

The HR Series has been engineered & designed to improve indoor air quality by reducing excess humidity or other contaminants during the winter time, and replacing this air by fresh filtered air from the outdoors. During colder seasons, the units heat recovery core (polypropylene core) will reclaim the heat from the outgoing stale air and use this heat to temper the incoming fresh air, which reduces the cost of effectively ventilating the home during winter. This process is reversed in the summer months.

Model HR is available  
in our Quickship program.  
All sizes are available for next  
day shipping from stock.



**Limited Lifetime core warranty. 5-year warranty on balance of unit.**

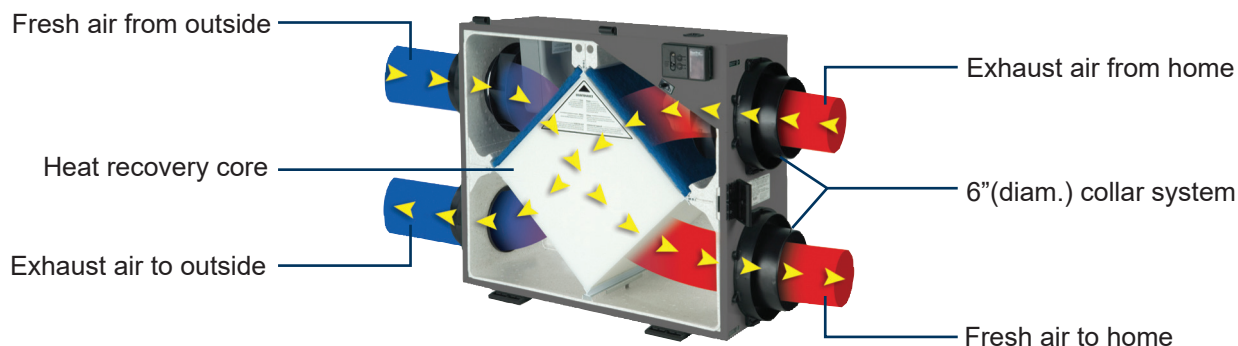


## STANDARD SPECIFICATIONS AND FEATURES

- Polypropylene HRV core
- 3 operating modes (Intermittent, Continuous and High Speed)
- Duotrol™ balancing system reduces noise that would be produced by balancing dampers
- Unique collar system for easy manipulation of duct for better and quicker installation
- Painted galvanized steel case
- Designed for simple installation by a single person
- Washable filters
- Fully insulated case
- **Limited lifetime warranty** on the heat recovery core
- 5-year warranty on balance of unit

## The HRV Core

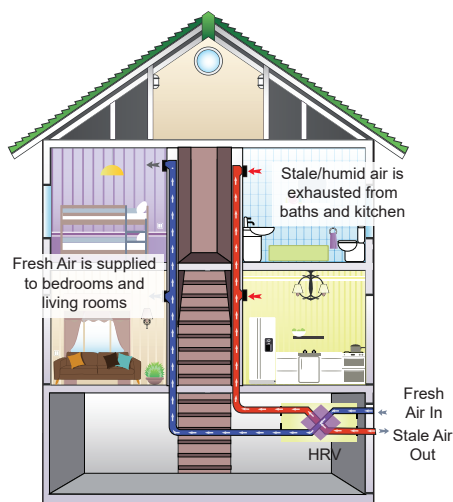
- During colder seasons the core will reclaim the heat from the outgoing stale air and reuse this heat to temper the incoming fresh air
- Designed to maximize airflow and performance
- Reduces the cost of effectively heating the home during the winter
- Constructed from a composite of polypropylene materials that allows latent heat transfer from one airstream to another while preventing cross contamination
- Polypropylene (plastic) core reduces condensation compared to aluminum cores
- Limited lifetime warranty



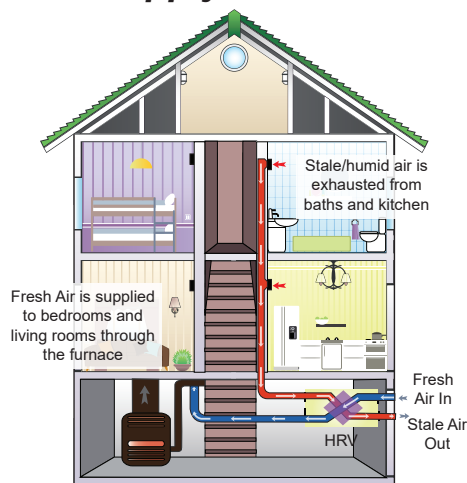
## Types of Installation

The HR Series can be installed as independent systems that use independent ductwork or they can be connected to the existing duct of the forced air heating or cooling system. The “Best” and “Better” systems meet the ASHRAE 62.2 Whole Building requirement when using an JencoFan HR control (see pg 18).

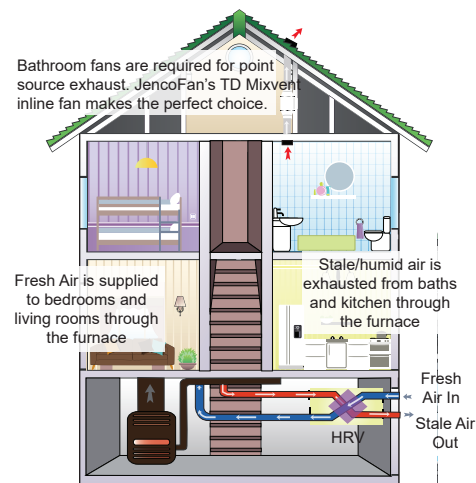
### *The Best System: Independent System*



### *The Better System: Exhaust at the source and supply in the return*



### *The Good System: Exhaust and supply in the return*



## JencoFan's HRV System

- **Duotrol™ Systems:** Selects ventilation modes (OFF, CONT or INTER), also to adjust the continuous airflow rates: Increasing (+)/Decreasing (-).
- **Motors(2):** Designed with high performance and reliability, they are maintenance free for comfort and peace of mind.
- **Synthetic Filters:** Capture the largest particle & protects the heat recovery core from potential obstruction by these particles.
- **Heat Recovery Core:** A polypropylene cross-flow type it is designed to transfer the heat between both exhaust & supply air streams without allowing any contamination or mixing of both air streams to maximize the efficient and improve indoor air quality.
- **Condensate Drain Pan & Drainage Hose:** Captures the water that accumulates during the heat transfer and defrosts sequence in the fall, winter & early spring seasons. Drain hose is connected to the drain pan and serves as drainage for the accumulation of water. It is normal during summer months to find no condensation in drain pan or in drainage hose.
- **Automatic Defrost Sequence:** The defrost sequence is electronically controlled to measure the incoming outdoor air temperature, the sequence is activated at -5°C (23°F) and colder and the duration is for 5 minutes then returns to normal operation for 25 minutes. This system eliminates that the heat recovery core doesn't build with ice or freezes.
- **Defrost sequence:** Supply fan shuts down, the exhaust fan speed increases pending the measured outside temperature.







## **CONTROLS**



### **HRT-3 - Push Button Timer**

- The HRT-3 model push button timer allows the homeowner control of the indoor humidity level in rooms where excess humidity is produced
- Press the button once the LED comes on then release, this activates the ventilation system to high speed for 20 minutes.
- Press the button until the LED blinks 2 times then release, this activates the ventilation system to high speed for 40 minutes.
- Press the button until the LED blinks 3 times then release, this activates the ventilation system to high speed for 60 minutes.
- Meets ASHRAE 62.2 continuous ventilation standards



### **HRRD-1 - Dehumidistat**

- The HRRD-1 allows the users to select the humidity level using the Relative Humidity Sensor Dial
- The Relative Humidity Sensor Dial will “click” when the dial reaches approximate level of relative humidity and overrides the ventilation system to high speed once the level of humidity is above the set point
- For best results install in bathrooms, kitchen and laundry room
- Meets ASHRAE 62.2 continuous ventilation standards



### **HRRD-3P - Dehumidistat**

- The HRRD-3P allows the users to select the humidity percentage, fan range and operation modes.
- Includes Relative Humidity Sensor, Speed Control Selector Switch and Mode Selector Switch
- The Relative Humidity Sensor Dial will “click” when the dial reaches approximate level of relative humidity and overrides the ventilation system to high speed once the level of humidity is above the set point
- Speed Control (OFF, NORMAL and REDUCED)
- Mode Control (INTERM and CONT)
- For best results install in bathrooms, kitchen and laundry room
- Meets ASHRAE 62.2 continuous ventilation standards



## HR100V



### Specifications

Polypropylene HRV Core: cross-flow that transfers sensible heat			
Typical Airflow Range: 30-100 CFM			
Duct Connections: Four (4) 5" oval ISF double collar system			
Number Motors: Two (2) PSC variable speed backward curved			
V	Hz	Phase	Amperage
120	60	Single	0.85 A / 66 watts
Exchange surface: 63.5 ft <sup>2</sup>			
Defrost type: Evacuation			
Filters: Two (2) Fiberbond washable			
Drain Connection: 1/2"			
DuoTrol: Integrated Balancing System			
Weight: 33.5 lbs (unit), 41 lbs (in carton)			
Dimensions: 22" W x 19-13/16" L x 14-19/32" H			
Options:			
HRT-3 - Push Button Timer			
HRRD-1 - Dehumidistat			
HRRD-3P - Dehumidistat			

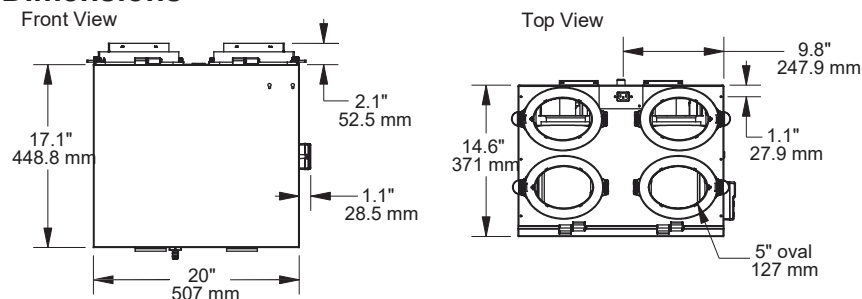
### Energy Performance (Heating)

Supply Temperature		Net Air Flow		Power Consumed (Watts)	Sensible Recovery Efficiency	Apparent Sensible Effectiveness
°F	°C	CFM	L/s			
32	0	40	19	28	64	72
32	0	65	30	40	59	66
-13	-25	37	18	30	55	73

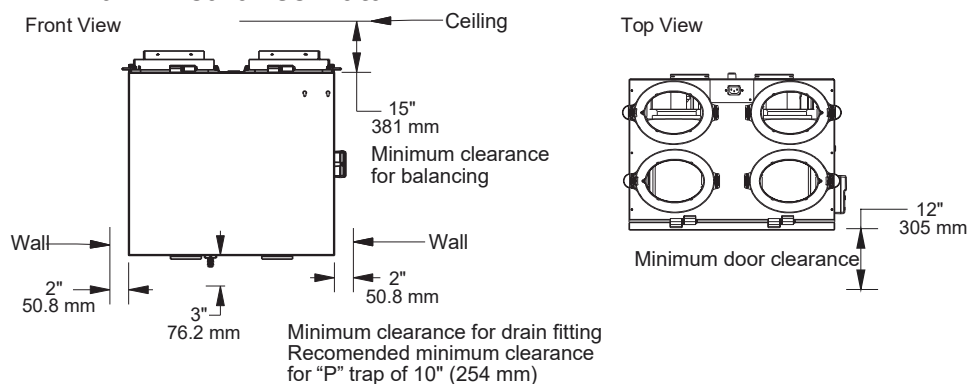
### Ventilation Performance

External Static Pressure		Net Air Flow		Gross Air Flow Supply		Gross Air Flow Exhaust	
Pa	in. w.g.	L/s	CFM	L/s	CFM	L/s	CFM
25	0.1	47	99	48	100	48	102
50	0.2	44	93	45	94	43	92
75	0.3	39	83	40	84	38	80
100	0.4	35	75	35	75	36	78
125	0.5	30	65	30	66	32	68
150	0.6	27	56	27	57	25	52
175	0.7	22	46	22	47	19	41

### Dimensions



### Minimum Clearance Data



## HR160H



### Specifications

Polypropylene HRV Core: cross-flow that transfers sensible heat			
Typical Airflow Range: 30-160 CFM			
Duct Connections: Four (4) 6" dia. ISF double collar system			
Number Motors: Two (2) PSC variable speed backward curved			
V	Hz	Phase	Amperage
120	60	Single	1.5 A / 142 watts
Exchange surface: 85 ft <sup>2</sup>			
Defrost type: Evacuation			
Filters: Two (2) Fiberbond washable			
Drain Connection: 1/2"			
DuoTrol: Integrated Balancing System			
Weight: 43 lbs (unit), 49 lbs (in carton)			
Dimensions: 29-1/2" W x 22-1/2" L x 11-3/8" H			
Options: HRT-3 - Push Button Timer HRRD-1 - Dehumidistat HRRD-3P - Dehumidistat			

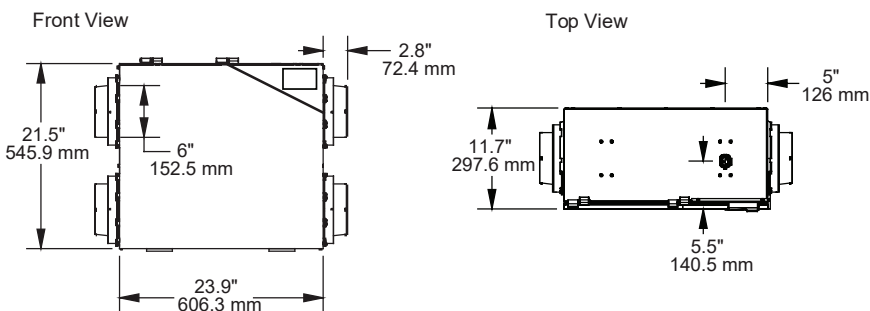
### Energy Performance (Heating)

Supply Temperature		Net Air Flow		Power Consumed (Watts)	Sensible Recovery Efficiency	Apparent Sensible Effectiveness
°F	°C	CFM	L/s			
32	0	65	31	72	66	75
32	0	83	39	80	63	72
32	0	107	50	94	60	67
-13	-25	76	36	72	56	73

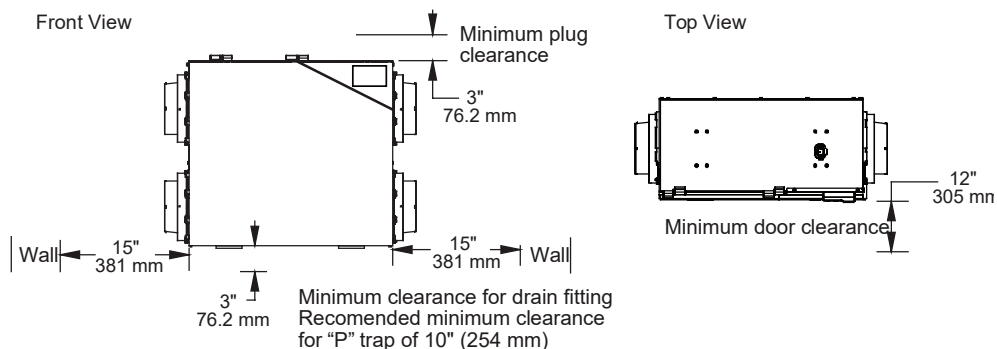
### Ventilation Performance

External Static Pressure		Net Air Flow		Gross Air Flow Supply		Gross Air Flow Exhaust	
Pa	in. w.g.	L/s	CFM	L/s	CFM	L/s	CFM
25	0.1	91	193	91	194	103	217
50	0.2	84	178	85	179	95	201
75	0.3	77	163	77	163	86	183
100	0.4	71	150	71	151	80	169
125	0.5	63	133	63	134	71	152
150	0.6	57	120	57	121	66	138
175	0.7	51	109	51	109	57	121

### Dimensions



### Minimum Clearance Data





## HR220H



### Specifications

Polypropylene HRV Core: cross-flow that transfers sensible heat			
Typical Airflow Range: 70-220 CFM			
Duct Connections: Four (4) 6" dia. ISF double collar system			
Number Motors: Two (2) PSC variable speed backward curved			
V	Hz	Phase	Amperage
120	60	Single	1.5 A / 142 watts
Exchange surface: 150 ft <sup>2</sup>			
Defrost type: Evacuation			
Filters: Two (2) Fiberbond washable			
Drain Connection: 1/2"			
DuoTrol: Integrated Balancing System			
Weight: 51 lbs (unit), 59 lbs (in carton)			
Dimensions: 29-1/2" W x 22-1/2" L x 16-1/2" H			
Options:			
HRT-3 - Push Button Timer			
HRRD-1 - Dehumidistat			
HRRD-3P - Dehumidistat			

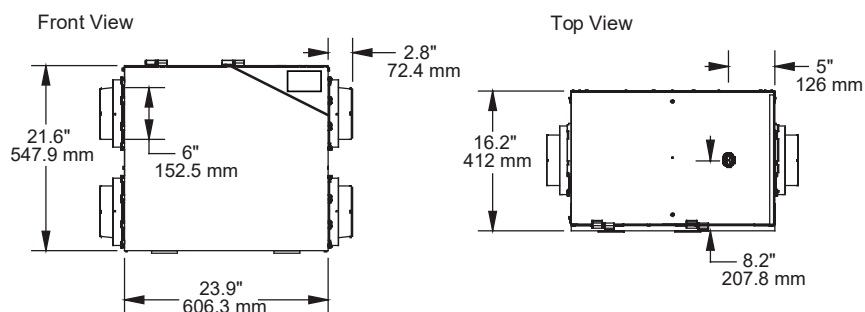
### Energy Performance (Heating)

Supply Temperature		Net Air Flow		Power Consumed (Watts)	Sensible Recovery Efficiency	Apparent Sensible Effectiveness
°F	°C	CFM	L/s			
32	0	118	55	106	61	71
32	0	160	75	132	58	65
32	0	185	87	150	55	62
-13	-25	120	57	105	58	72

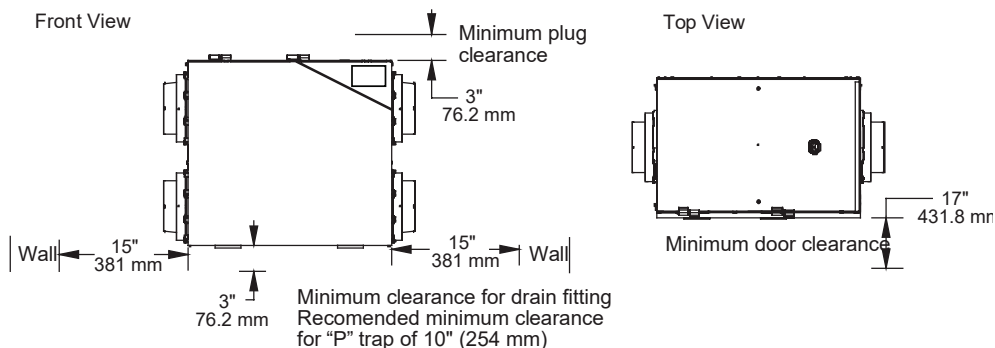
### Ventilation Performance

External Static Pressure		Net Air Flow		Gross Air Flow Supply		Gross Air Flow Exhaust	
Pa	in. w.g.	L/s	CFM	L/s	CFM	L/s	CFM
25	0.1	117	248	118	250	130	277
50	0.2	108	229	109	231	119	253
75	0.3	102	218	103	220	110	234
100	0.4	94	200	95	202	101	216
125	0.5	85	181	86	183	92	197
150	0.6	77	163	78	165	82	175
175	0.7	69	146	70	148	71	151

### Dimensions



### Minimum Clearance Data



# MODELS TR & TRC

TOTAL RECOVERY FOR ALL CLIMATES  
RESIDENTIAL OR COMMERCIAL APPLICATIONS

With JencoFan's TR & TRC (total recovery) Series for all climates, stale room air is exhausted and fresh outdoor air is brought back into the house. These two air streams are directed through a highly developed "air-to-air" energy exchange core. The air streams are physically separated by many layers of "plates" so there is no mixing or contamination of the fresh air. The plates are made of an engineered "resin" material that simultaneously transfers heat by conduction and humidity by attracting and moving water vapor from one air stream to the other.

JencoFan's TR & TRCs moderate extremes in both temperature and humidity, creating a comfortable indoor environment. The unique moisture transfer capability of the JencoFan core also eliminates condensation and frost build up in most applications. Unlike other ERVs on the market no mechanical or electrical defrost systems are needed, which means higher heat recovery efficiencies, easier installation and more reliable operation.

## Contractor Benefits

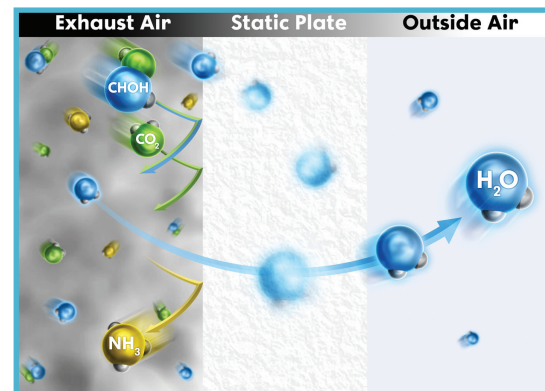
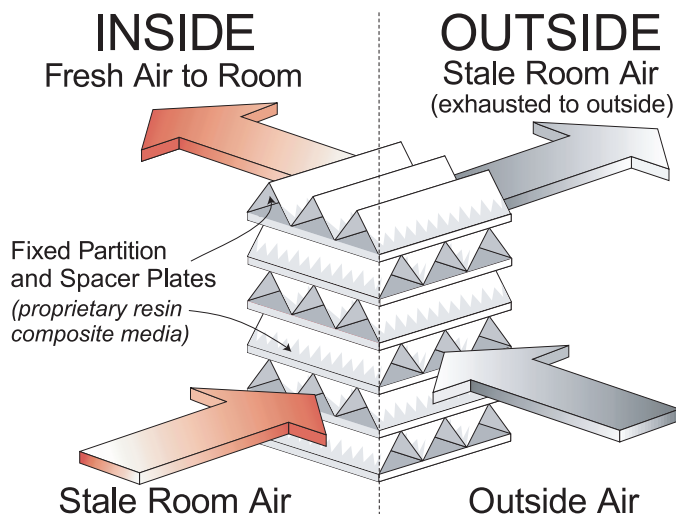


- Models compatible to any HVAC equipment
- Simple installation
- Mount in any orientation
- May be installed in unconditioned locations like attics and garages
- Easy-to-access field support
- Elimination of callbacks
- "Green Building" compliant

## The CORE

- Efficient transfer of heat and moisture
- No liquid is accumulated; no drain pan or defrost mechanism is required!
- Industry best **10-year** warranty

## 5th Generation Core



- Contaminated air is exhausted from the building, while the static plate core regulates extremes in humidity

## The Warranty

An JencoFan TR or TRC is protected by a 10-year core warranty with a 5-year warranty on balance of the TR unit and 2-year warranty on balance of the TRC unit. This commitment - twice as long as coverage on the best wheel products - means with JencoFan you can just fit and forget.

**10-YEAR**  
Core Warranty





## MODEL TR AND TRC SIZING

### ***Choosing the Right Size TR by Square Footage***

*Choosing the correct size TR for your structure is easy, all you need to know is the square footage.*

If your structure is up to:

1500 Sq. Ft. you need a **TR90/TR90G**

2700 Sq. Ft. you need a **TR130**

4000 Sq. Ft. you need a **TR200**

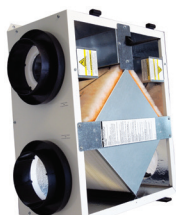
6000 Sq. Ft. you need a **TR300**



### ***Choosing the Right Size TR or TRC by Air Handler Load***

For each ton of air handling capacity, 120 CFM of Energy Recovery Ventilation is recommended.

Ton	Capacity 30% Outside Air Fraction in CFM	Model Needed
1.0	120	TR130
1.5	180	TR200
2.0	240	TR300
2.5	300	TR300
3.0	360	TRC500
3.5	420	TRC500
4.0	480	TRC500
5.0	600	TRC800
6.5	780	TRC800
8.0	960	TRC1200
12	1,440	TRC1200
13.5	1,620	TRC1600



**Model TR90/TR90G**



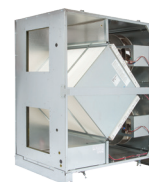
**Models TR130,  
TR200 and TR300**



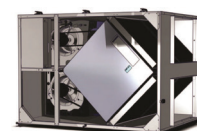
**Model TRC500**



**Model TRC800**



**Model TRC1200**



**Model TRC1600**



**10-YEAR**  
Core Warranty

### **MODEL FEATURES**

- MERV-8 filters
- Less than 1 watt stand-by power consumption
- Transformer/relay package allowing simple on/off control
- Plastic double collars for 6 or 8" direct duct connection (TR300 is 8" only)
- 3' power cord
- Integral mounting flange and hanging bracket system
- Fully insulated case
- Large cores for high efficiency
- No condensate pan or drain required

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### **MODEL OVERVIEW**

To protect the two most valuable investments of your life, your home and your family, improving indoor air quality is key. With JencoFan's TR (total recovery) Series for all climates, stale room air is exhausted and fresh outdoor air is brought back into the house. With this line of ERVs (Energy Recovery Ventilators) these two air streams are directed through a highly developed "air-to-air" energy exchange core. The air streams are physically separated by many layers of "plates" so there is no mixing or contamination of the fresh air. The plates are made of an engineered "resin" material that simultaneously transfers heat by conduction and humidity by attracting and moving water vapor from one air stream to the other.

JencoFan's TRs moderate extremes in both temperature and humidity, creating a comfortable indoor environment. The unique moisture transfer capability of the JencoFan core also eliminates condensation and frost build up in most applications. Unlike other ERVs on the market no mechanical or electrical defrost systems are needed, which means higher heat recovery efficiencies, easier installation and more reliable operation.

**10-year industry best core warranty. 5-year warranty on balance of unit.**

All specifications are subject to change without notice unless approved in submittal by JencoFan.

GC\_TR\_0319

March 2019



MODEL TR

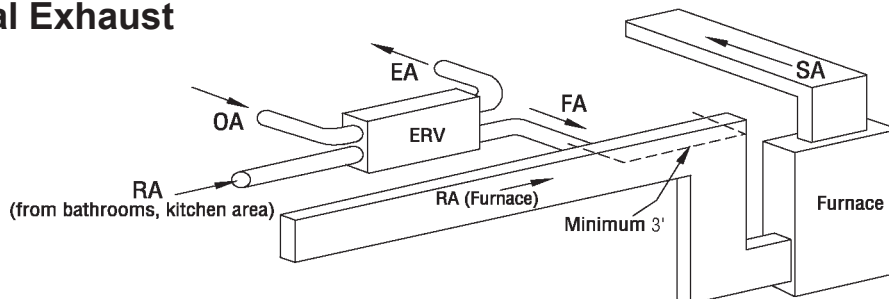
TOTAL RECOVERY FOR ALL CLIMATES

JencoFan

## STANDARD SPECIFICATIONS AND FEATURES

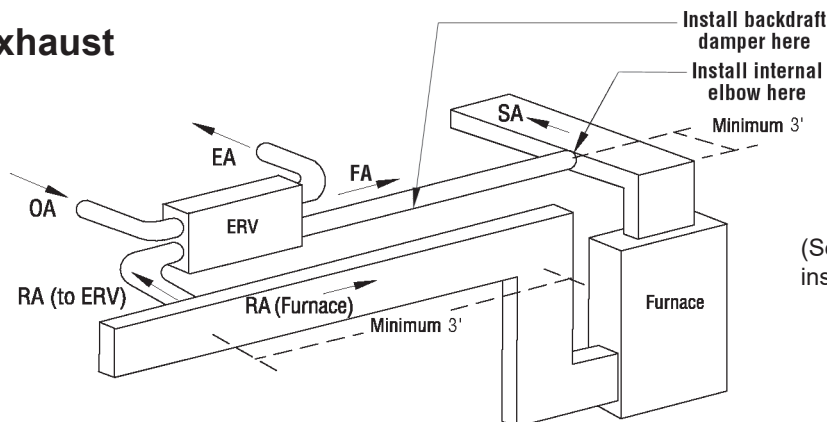
- MERV-8 filters
- Less than 1 watt stand-by power consumption
- Transformer/relay package allowing simple on/off control
- Plastic double collars for 6 or 8" direct duct connection (TR300 is 8" only)
- TR90, TR130, TR300 have painted case, low voltage controls, 3' Power cord
- TR90G has galvanized case, line voltage and no line cord
- Integral mounting flange and hanging bracket system
- Fully insulated case
- Large cores for high efficiency
- No condensate pan or drain required
- **10-year** industry best core warranty
- 5-year warranty on balance of unit

### Central Exhaust



Note: ERV Blower may be operated separately from Furnace Blower

### General Exhaust



(See manual for additional installation details.)

Note: ERV Blower may be operated separately from Furnace Blower



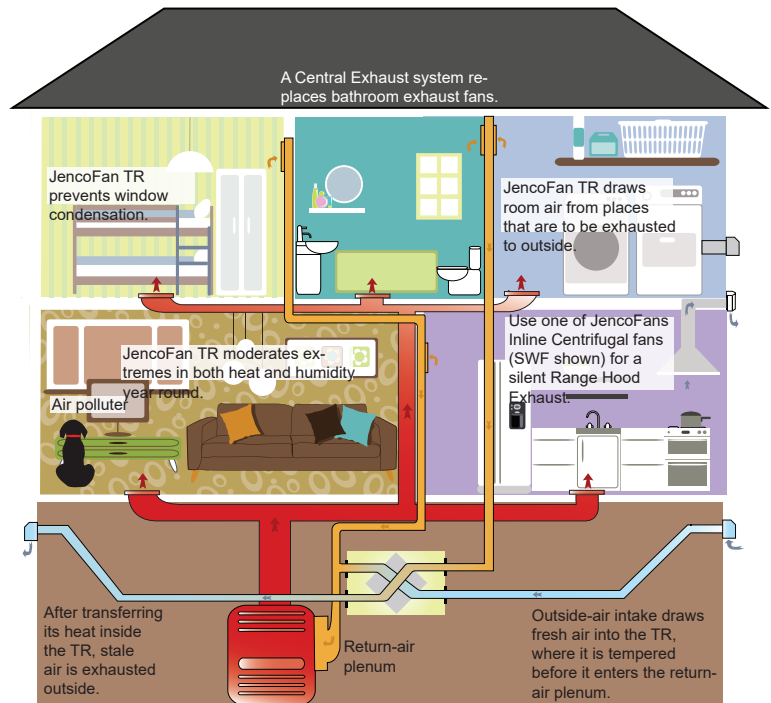
## TR APPLICATIONS

### Central Exhaust

Your BEST choice for green ventilation, Series TR exhausts stale air, brings in fresh air and saves energy year-round.

#### Series TR

- Replaces bathroom exhaust fans
- 20 CFM continuous per bathroom
- 50 CFM intermittent per bathroom
- Meets ASHRAE 62.2 when used with one of JencoFan's Percentage Timer Controls
- Other possible exhaust locations: kitchen area (cannot exhaust range hood), utility room, smoking room, hobby room, etc.
- Small duct work system to collect air from each exhaust location
- Fresh air may be supplied to furnace (AC) return air duct
- Optional automatic proportional runtime control and push button control available



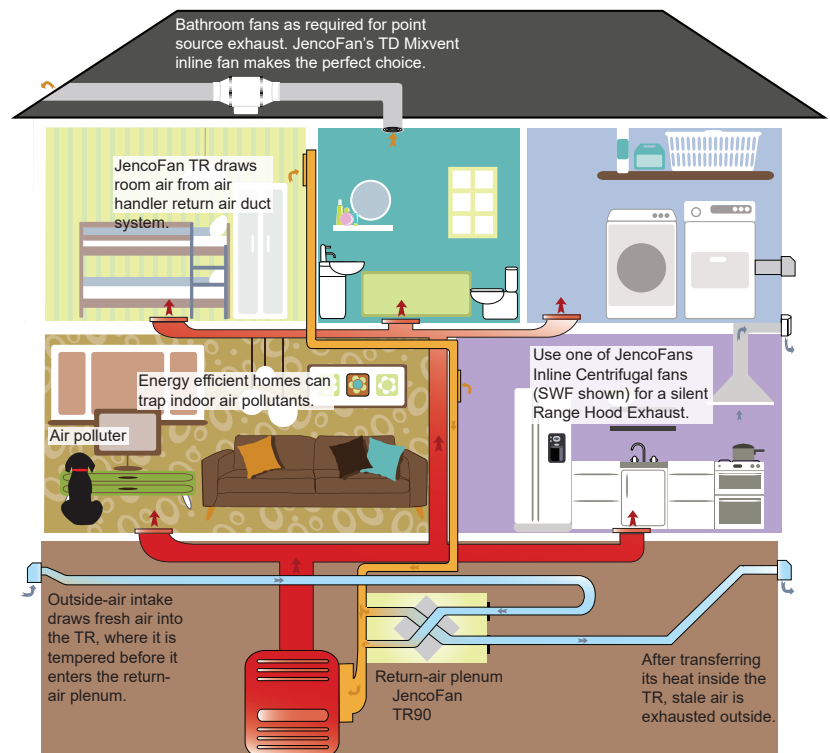
### General Ventilation

*Bathroom exhaust fans are required with this application*

#### The Perfect Pair



To get the most efficient and effective general ventilation system available use a TR with JencoFan's exclusive TD-MIXVENT inline fans for bathroom exhaust.





## CONTROLS



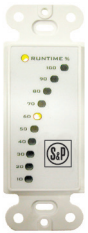
### **SPTL - Percentage Timer Control**

- Primary control for TR90, TR130, TR200 and TR300
- Runs unit an adjustable amount of time each hour
- Two wire, low voltage connection to TR
- Meets ASHRAE 62.2 continuous ventilation standards



### **SPBL - Push Button Point-of-Use Control**

- Push button control turns on unit from bathrooms or other intermittent exhaust locations
- 20 minute run-time with one touch
- Push 2x for 40 or 3x for 60 minutes
- Two wire, low voltage connection to SPTL



### **SFM - Percentage Timer Control with Furnace Interlock**

- Alternate primary control for TR90, TR130, TR200 and TR300
- Wires to TR unit and either thermostat or furnace control to turn on furnace blower
- Six wire, low voltage connection
- Meets ASHRAE 62.2 continuous ventilation standards

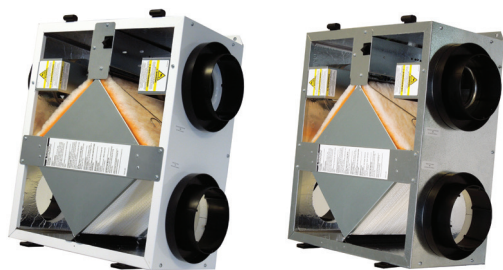


### **SHW-20 - Dehumidistat**

- Rotary dial dehumidistat
- Turn the dial to set desired humidity level
- Designed for convenient installation in bathrooms, kitchen or laundry room
- Dehumidifies when inside air is more humid than the set point
- **Caution:** the outside air must be less humid than the indoor air for this to work.



## TR90/TR90G



## Specifications

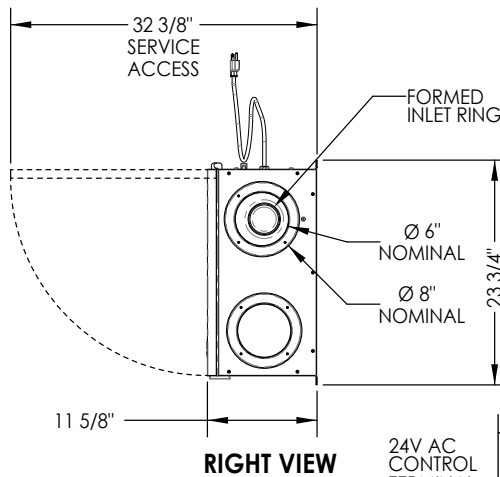
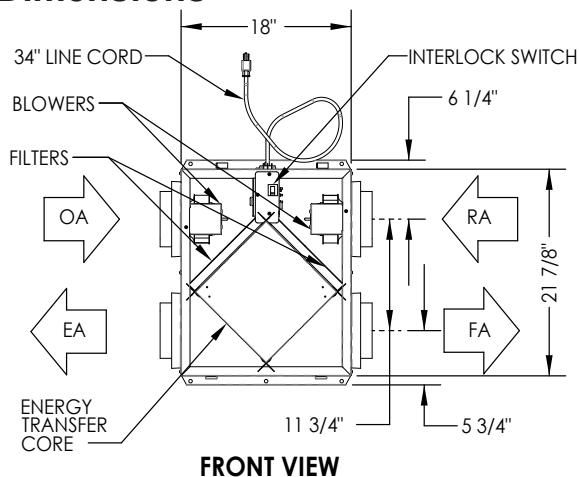
Ventilation Type: Static Plate, Heat and Humidity Transfer				
Typical Airflow Range: 40-110 CFM				
TR90 - Painted Case, Low Voltage Controls, Line Cord				
TR90G - Galvanized Case, Line Voltage, No Line Cord				
Unit may be mounted in any orientation and in heated or unheated locations				
Number Motors: Two, 0.03 HP each, totally enclosed, thermally protected, 0.35A				
V	Hz	Phase	Input Watts	FLA
120	60	Single	94 @ 69 CFM	0.16
Control Voltage: 24 VAC				
Filters: MERV 8, spun polyester media. 7-12" x 10-1/2" x 1"				
Weight: 36 lbs (unit), 41 lbs (in carton)				
Shipping Dimensions: 28-1/2" L x 21-1/2" W x 14-3/4" H				
Options (for TR90 only, not compatible with TR90G):				
SPTL - Percentage Timer Control				
SPBL - Push Button Point-of-Use Control				
SFM Percentage Timer Control with Furnace Interlock				
SHW-20 - Dehumidistat Control				

## Performance

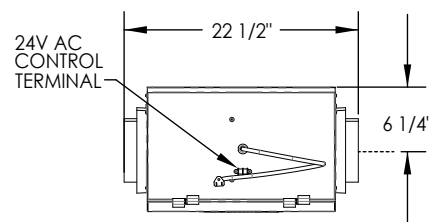
Airflow CFM	Temp EFF%	Temp Winter%*	Total EFF% Summer*
113	61	55	42
98	64	58	46
85	67	61	49
73	69	33	53
58	72	66	57
40	76	70	61

\* Contact Factory for HVI certification report for complete certified rating.

## Dimensions



EA: Exhaust Air to outdoors  
OA: Outdoor Air intake  
RA: Room Air to be exhausted  
FA: Fresh Air to inside



TOP VIEW



## TR130



## Performance

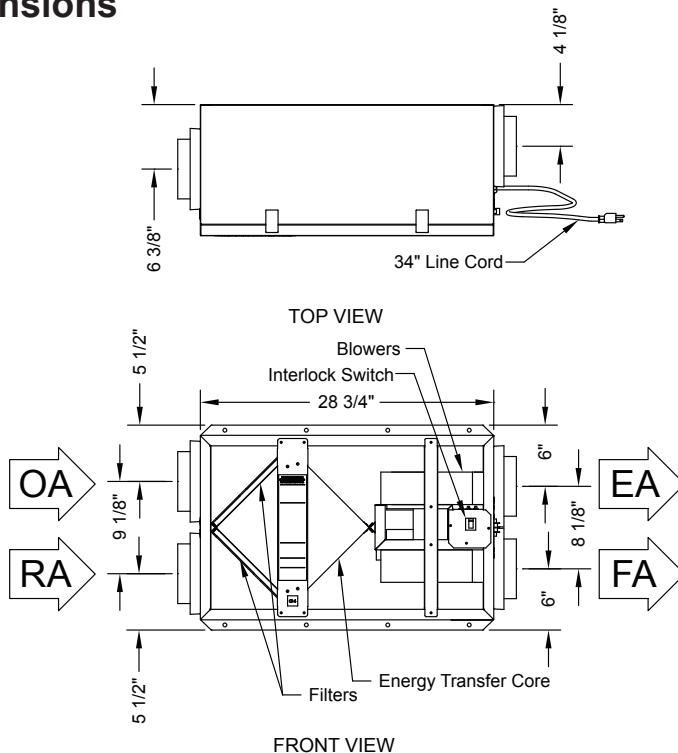
Airflow CFM	ESP in H <sub>2</sub> O	Temp EFF%	Total EFF% Winter/Summer*
79	0.60	78	73/60
104	0.50	75	69/55
126	0.40	72	66/50
137	0.30	71	64/48
153	0.20	68	61/45
165	0.10	67	59/43

\* Contact Factory for HVI certification report for complete certified rating.

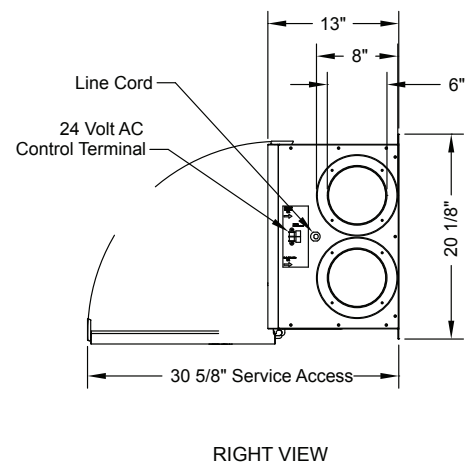
## Specifications

Ventilation Type: Static Plate, Heat and Humidity Transfer				
Typical Airflow Range: 50-140 CFM				
Unit may be mounted in any orientation				
Number Motors: One, 0.1 hp				
V	Hz	Phase	Input Watts	FLA
120	60	Single	102 @ 130 CFM	1.2
Control Voltage: 24 VAC transformer / relay package with switched dry contacts				
Filters: MERV 8, spun polyester media. 10-1/2" x 10-1/2" x 1"				
Weight: 49 lbs (unit), 60 lbs (in carton)				
Shipping Dimensions: 32" L x 21" W x 17-1/2" H (in carton)				
Options: SPTL - Percentage Timer Control SPBL - Push Button Point-of-Use Control SFM Percentage Timer Control with Furnace Interlock SHW-20 - Dehumidistat Control				

## Dimensions



EA: Exhaust Air to outdoors  
OA: Outdoor Air intake  
RA: Room Air to be exhausted  
FA: Fresh Air to inside







## TR200



## Performance

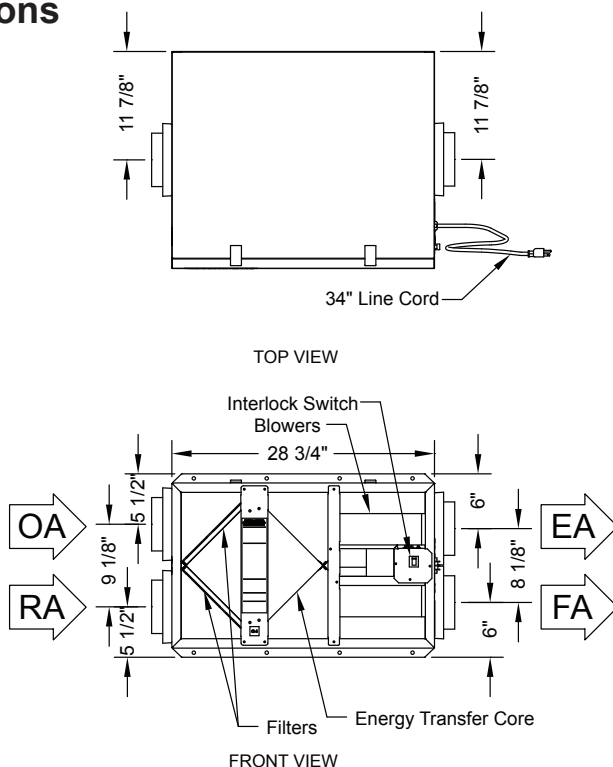
Airflow CFM	ESP in H <sub>2</sub> O	Temp EFF%	Total EFF% Winter/Summer*
122	0.70	81	77/64
149	0.60	79	75/61
168	0.50	78	73/59
176	0.40	78	72/59
186	0.30	77	72/58
192	0.20	77	71/57
207	0.10	76	70/56

\* Contact Factory for HVI certification report for complete certified rating.

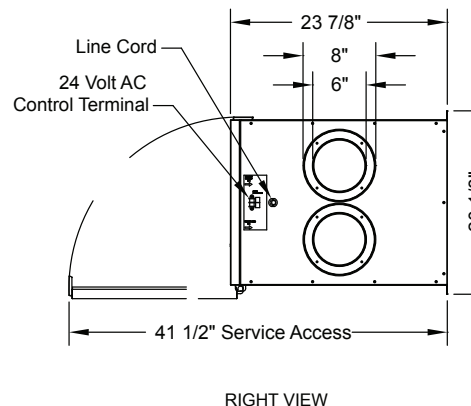
## Specifications

Ventilation Type: Static Plate, Heat and Humidity Transfer				
Typical Airflow Range: 100-200 CFM				
Unit may be mounted in any orientation				
Number Motors: One, 0.1 hp				
V	Hz	Phase	Input Watts	FLA
120	60	Single	157 @ 181 CFM	1.5
Control Voltage: 24 VAC transformer / relay package with switched dry contacts				
Filters: MERV 8, spun polyester media. 10-1/2" x 21-3/4" x 1"				
Weight: 70 lbs (unit), 82 lbs (in carton)				
Shipping Dimensions: 32" L x 21-1/2" W x 29" H (in carton)				
Options:				
SPTL - Percentage Timer Control				
SPBL - Push Button Point-of-Use Control				
SFM Percentage Timer Control with Furnace Interlock				
SHW-20 - Dehumidistat Control				

## Dimensions



EA: Exhaust Air to outdoors  
OA: Outdoor Air intake  
RA: Room Air to be exhausted  
FA: Fresh Air to inside





MODEL TR

TOTAL RECOVERY FOR ALL CLIMATES

JencoFan

## TR300



## Performance

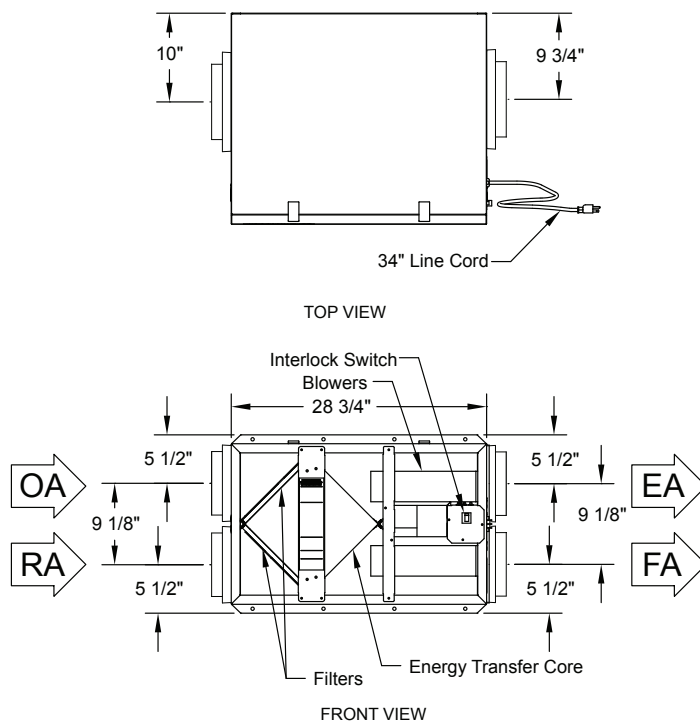
Airflow CFM	ESP in H <sub>2</sub> O	Temp EFF%	Total EFF% Winter/Summer*
170	1.0	78	73/59
191	0.9	77	71/57
215	0.8	75	69/55
256	0.7	73	66/51
277	0.6	71	65/49
295	0.5	70	63/47
311	0.4	69	62/46

\* Contact Factory for HVI certification report for complete certified rating.

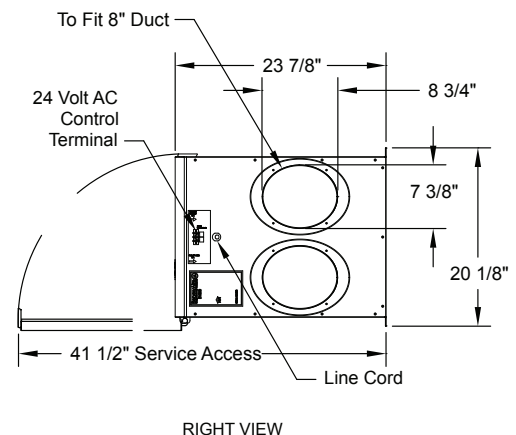
## Specifications

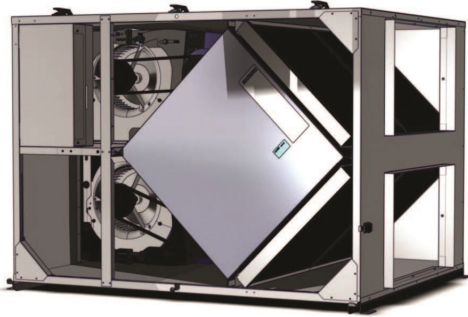
Ventilation Type: Static Plate, Heat and Humidity Transfer				
Typical Airflow Range: 150-300 CFM				
Unit may be mounted in any orientation				
Number Motors: One, 0.2 hp				
V	Hz	Phase	Input Watts	FLA
120	60	Single	315 @ 297 CFM	3.3
Control Voltage: 24 VAC transformer / relay package with switched dry contacts				
Filters: MERV 8, spun polyester media. 10-1/2" x 21-3/4" x 1"				
Weight: 72 lbs (unit), 85 lbs (in carton)				
Shipping Dimensions: 32" L x 21-1/2" W x 29" H (in carton)				
Options: SPTL - Percentage Timer Control SPBL - Push Button Point-of-Use Control SFM Percentage Timer Control with Furnace Interlock SHW-20 - Dehumidistat Control				

## Dimensions



EA: Exhaust Air to outdoors  
OA: Outdoor Air intake  
RA: Room Air to be exhausted  
FA: Fresh Air to inside





### **MODEL FEATURES**

- MERV-8 filters
- Transformer/relay package allowing simple on/off control
- Access doors for easy access to blowers, core and filters
- Fully insulated case
- Large cores for high efficiency
- No condensate pan or drain required



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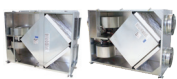
### **MODEL OVERVIEW**

With JencoFan's TRC (total recovery for commercial applications) Series for all climates, stale room air is exhausted and fresh outdoor air is brought back into the building. With this line of ERVs (Energy Recovery Ventilators) these two air streams are directed through a highly developed "air-to-air" energy exchange core. The air streams are physically separated by many layers of "plates" so there is no mixing or contamination of the fresh air. The plates are made of an engineered "resin" material that simultaneously transfers heat by conduction and humidity by attracting and moving water vapor from one air stream to the other.

JencoFan's TRCs moderate extremes in both temperature and humidity, creating a comfortable indoor environment. The unique moisture transfer capability of the JencoFan core also eliminates condensation and frost build up in most applications. Unlike other ERVs on the market no mechanical or electrical defrost systems are needed, which means higher heat recovery efficiencies, easier installation and more reliable operation.

**10-year industry best core warranty. 2-year warranty on balance of unit.**

All specifications are subject to change without notice unless approved in submittal by JencoFan.

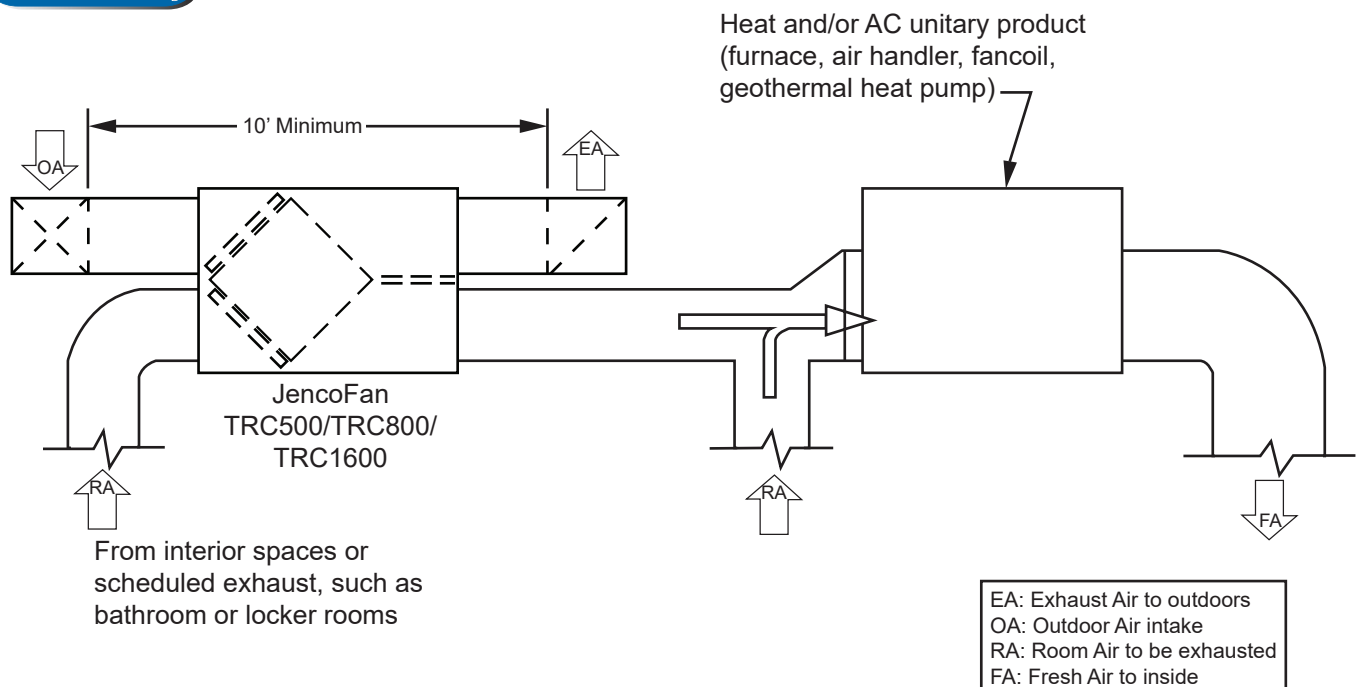
**MODEL TRC**

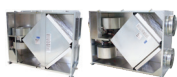
TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS

**JencoFan**

## STANDARD SPECIFICATIONS AND FEATURES

- AHRI certified performance data for efficiency and cross leakage.
- UL tested flammability and smoke generation that meets NFPA 90A and 90B test standards for commercial applications.
- Easy installation and service.
- Easiest maintenance of any ERV
- MERV-8 filters (2 in the TRC500 & TRC800, 4 in the TRC1200 & TRC1600)
- Transformer/relay package allowing simple on/off control
- Access doors for easy access to blowers, core and filters
- TRC500 & TRC800 have integral mounting flange and hanging bracket system
- TRC1200 & TRC1600 have mounting feet for installation at floor level
- 2 Direct Drive, TEFC, Premium Efficient blower motors in the TRC500, TRC800, & TRC1200
- 2 Belt Drive, TEFC, Premium Efficient blower motors in the TRC1600
- Fully insulated case
- Large cores for high efficiency
- No condensate pan or drain required
- **10-year** industry best core warranty
- 2-year warranty on balance of unit





## **CONTROLS**

These controls are intended to turn JencoFan commercial energy recovery ventilation systems on and off at appropriate times. Specification, installation and set-up is an easy process. The TRC units come standard with a 24 volt transformer/relay package for easy interface with all controls.

It is not necessary that JencoFan controls be used to operate JencoFan units. A wide range of controls or building automation systems may be used.

The JencoFan residential (TR) units have their own line of compatible controls that are not intended to operate JencoFan commercial (TRC) units.

### **STC7D-W - Digital Time Clock - Wall Mount**



- Up to 8 on/off cycles per day or 56 per week
- 24 VAC power requirement
- Battery back-up
- Fits any 4" x 4" electrical box

---

### **SMC-C - Motion (Occupancy) Control - Ceiling Mount**



- Passive infrared sensor
- Adjustable time-off delay to 30 minutes
- 24 VAC power requirement
- Covers up to 1500 sq. ft. floor space  
*walking motion coverage up to 22 foot radius*

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### **SCO2-W - Carbon Dioxide Control - Wall Mount**



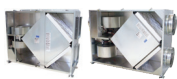
- Adjustable control from 600-2000 PPM
- Digital display
- 24 VAC power requirement
- Computer/BAS interface for information and control
- Self calibrates during periods of low occupancy

---

### **SHW-20 - Dehumidistat**



- Rotary dial dehumidistat
- Turn the dial to set desired humidity level
- Designed for convenient installation in bathrooms, kitchen or laundry room
- Dehumidifies when inside air is more humid than the set point
- **Caution:** the outside air must be less humid than the indoor air for this to work.



**MODEL TRC**

TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS

**JencoFan**

## TRC500



## Performance

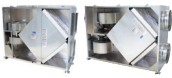
Airflow CFM	ESP in H <sub>2</sub> O	Watts	Temp EFF%	Total EFF% Winter/Summer*
225	1.25	335	81	76/66
338	1.00	420	77	71/61
380	0.90	470	75	69/59
450	0.65	550	73	66/56
540	0.25	640	70	62/52
575	0.00	690	69	61/51
600	-0.25	735	68	60/50

\* At AHRI 1060 standard conditions  
(see certified data on page 69 for core components.)  
Note: Watts is for the entire unit.

## Specifications

Ventilation Type: Static Plate, Heat and Humidity Transfer					
Typical Airflow Range: 200-540 CFM					
AHRI 1060 Certified Core: One L85					
Airflow Rating Points (for AHRI): 450 CFM and 338 CFM					
Motors: One, 0.6 hp (Single Phase)					
V	Hz	Phase	FLA	Min. Cir. Amps	Max. Overcurrent Protection Device
115	60	Single	7.0	8.8	15
208-230	60	Single	3.5	4.4	15
Standard Features: 24 VAC Transformer/Relay Package					
Filters: Two total, MERV 8, 2" pleated, 14" x 20" nominal size					
Weight: 141 lbs (unit), 160 lbs (in carton) 200 lbs (on pallet), up to 3 units on 40 lb pallet					
Shipping Dimensions: 48" L x 41" W x 18" H (in carton) 55" L x 42" W x 22" H (on pallet)					





MODEL TRC

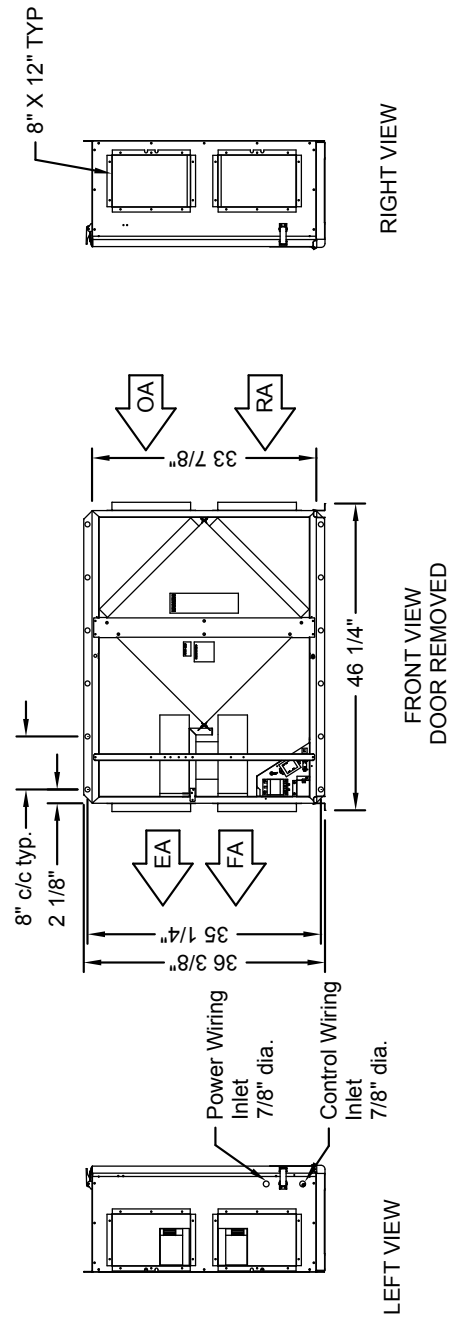
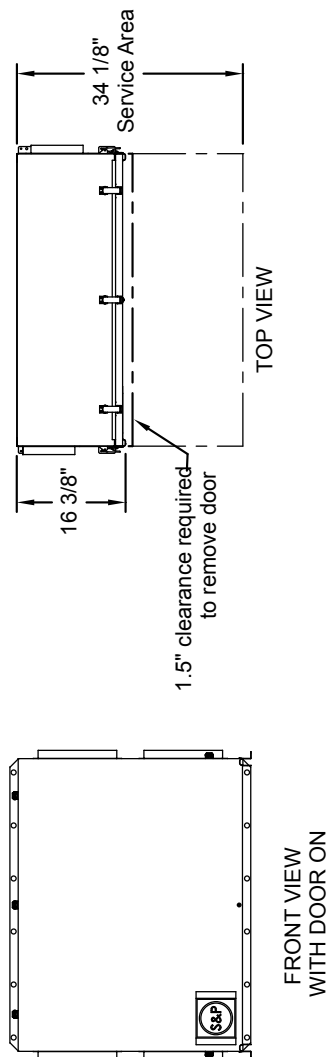
TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS

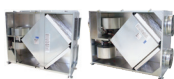
JencoFan

## TRC500

### Dimensions

EA: Exhaust Air to outdoors  
OA: Outdoor Air intake  
RA: Room Air to be exhausted  
FA: Fresh Air to inside





## MODEL TRC

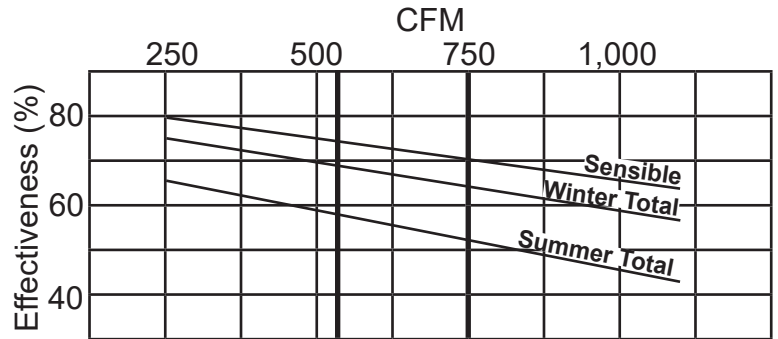
TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS

JencoFan

### TRC800



### Performance



\* At AHRI 1060 standard conditions  
(see certified data on page 69 for core components.)

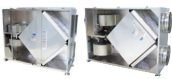
### Specifications

Ventilation Type: Static Plate, Heat and Humidity Transfer					
Typical Airflow Range: 250-925 CFM					
AHRI 1060 Certified Core: One L125-00					
Airflow Rating Points (for AHRI): 750 CFM and 563 CFM					
Number Motors: Two direct drive blower/motor packages					
V	Hz	Phase	FLA (per motor)	Min. Cir. Amps	Max. Overcurrent Protection Device
115	60	Single	9.0	20.3	25
208-230	60	Single	4.5	10.1	15
Standard Features: 24 VAC Transformer/Relay Package					
Filters: Two total, MERV 8, 2" pleated, 20" x 20" nominal size					
Weight: 211 lbs (unit), 300 lbs (shipping weight, on pallet)					
Shipping Dimensions: 62" L x 48" W x 40" H					

### Airflow Performance

Motor HP Phase	External Static Pressure (Inches Water Column)						
	0.0	0.25	0.5	0.75	0.9	1.25	1.5
0.75	970 CFM	925 CFM	860 CFM	795 CFM	750 CFM	635 CFM	480 CFM
Single Phase	1,490 Watts	1,375 Watts	1,270 Watts	1,160 Watts	1,090 Watts	950 Watts	825 Watts

Note: Watts is for the entire unit (two motors).



MODEL TRC

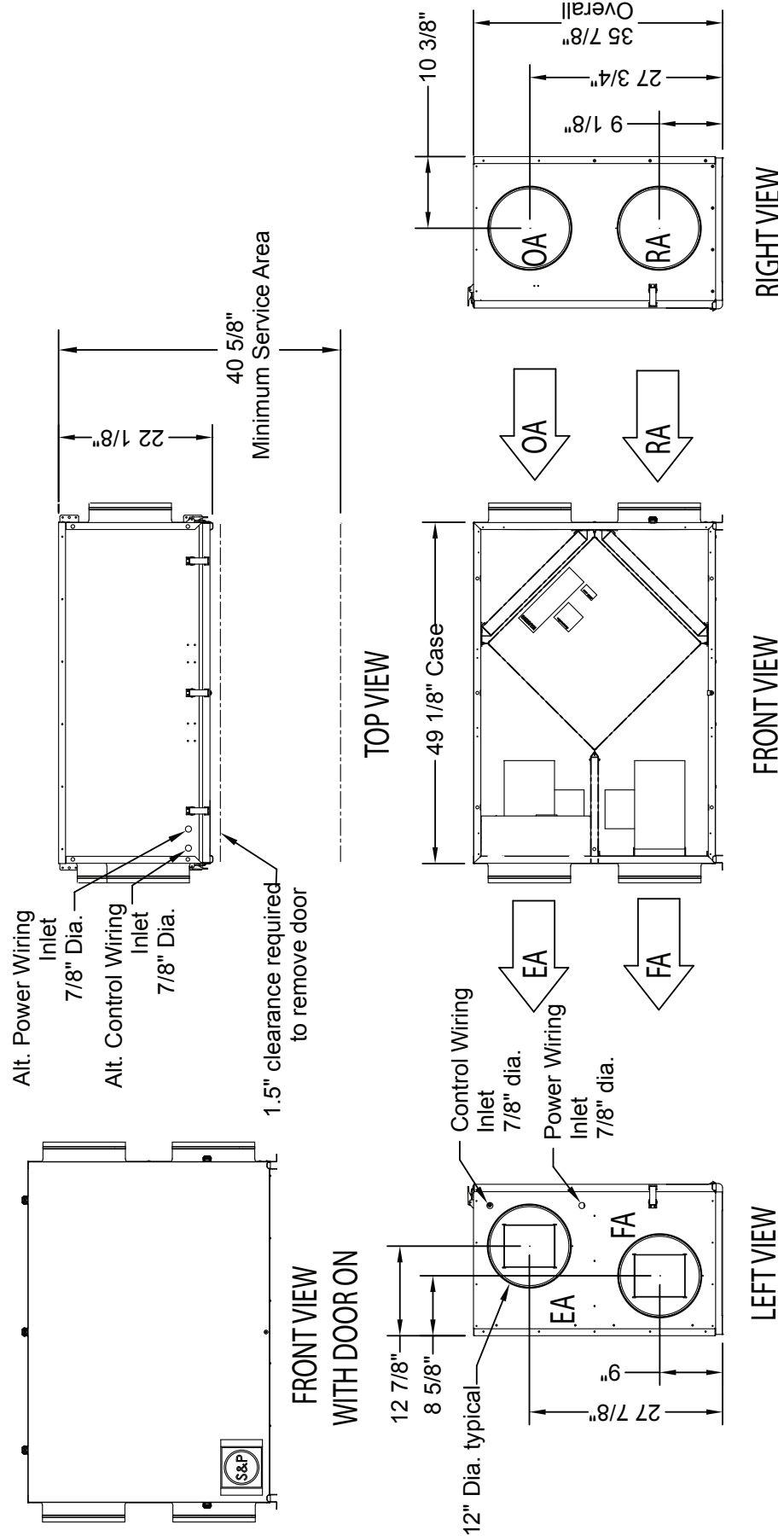
TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS

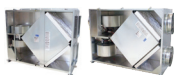
JencoFan

## TRC800

### Dimensions

EA: Exhaust Air to outdoors  
OA: Outdoor Air intake  
RA: Room Air to be exhausted  
FA: Fresh Air to inside





## MODEL TRC

TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS

**JencoFan**

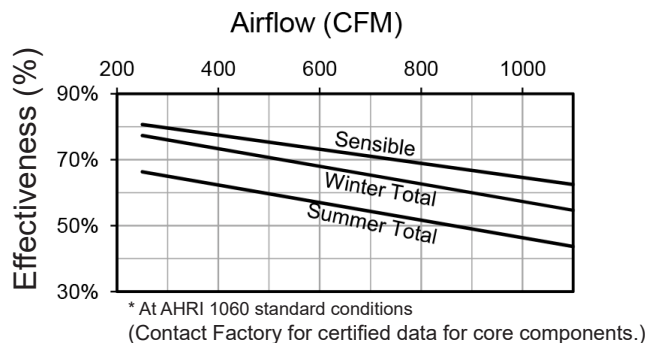
## TRC800V



## Specifications

Ventilation Type: Static Plate, Heat and Humidity Transfer					
Typical Airflow Range: 250-925 CFM					
AHRI 1060 Certified Core: One L125-G5					
Airflow Rating Points (for AHRI): 750 CFM and 563 CFM					
Number Motors: Two direct drive blower/motor packages					
V	Hz	Phase	FLA (per motor)	Min. Cir. Amps	Max. Overcurrent Protection Device
120	60	Single	9.0	20.3	25
208-230	60	Single	4.5	10.1	15
Standard Features: Non-Fused Disconnect 24 VAC Transformer/Relay Package					
Filters: Two total, MERV 8, 2" pleated, 20" x 20" nominal size					
Weight: 207 lbs (unit), 325 lbs (shipping weight, on pallet)					
Shipping Dimensions: 30" L x 42" W x 71" H					

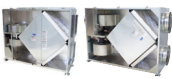
## Performance



## Airflow Performance

Motor HP Phase	External Static Pressure (Inches Water Column)						
	0.0	0.25	0.5	0.75	0.9	1.25	1.5
0.75	970 CFM	925 CFM	860 CFM	795 CFM	750 CFM	635 CFM	480 CFM
Single Phase	1,490 Watts	1,375 Watts	1,270 Watts	1,160 Watts	1,090 Watts	950 Watts	825 Watts

Note: Watts is for the entire unit (two motors).



**MODEL TRC**

TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS

**JencoFan**

## TRC800V

### Dimensions

#### ABBREVIATIONS

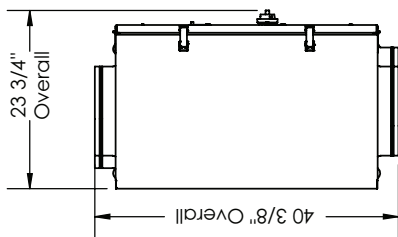
EA: Exhaust Air to Outside  
OA: Outside Air Intake  
RA: Room Air to be Exhausted  
FA: Fresh Air to Inside

#### INSTALLATION ORIENTATION

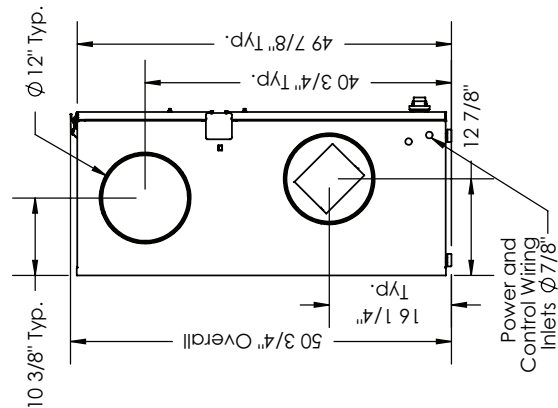
Unit may be installed in any orientation.

#### NOTE

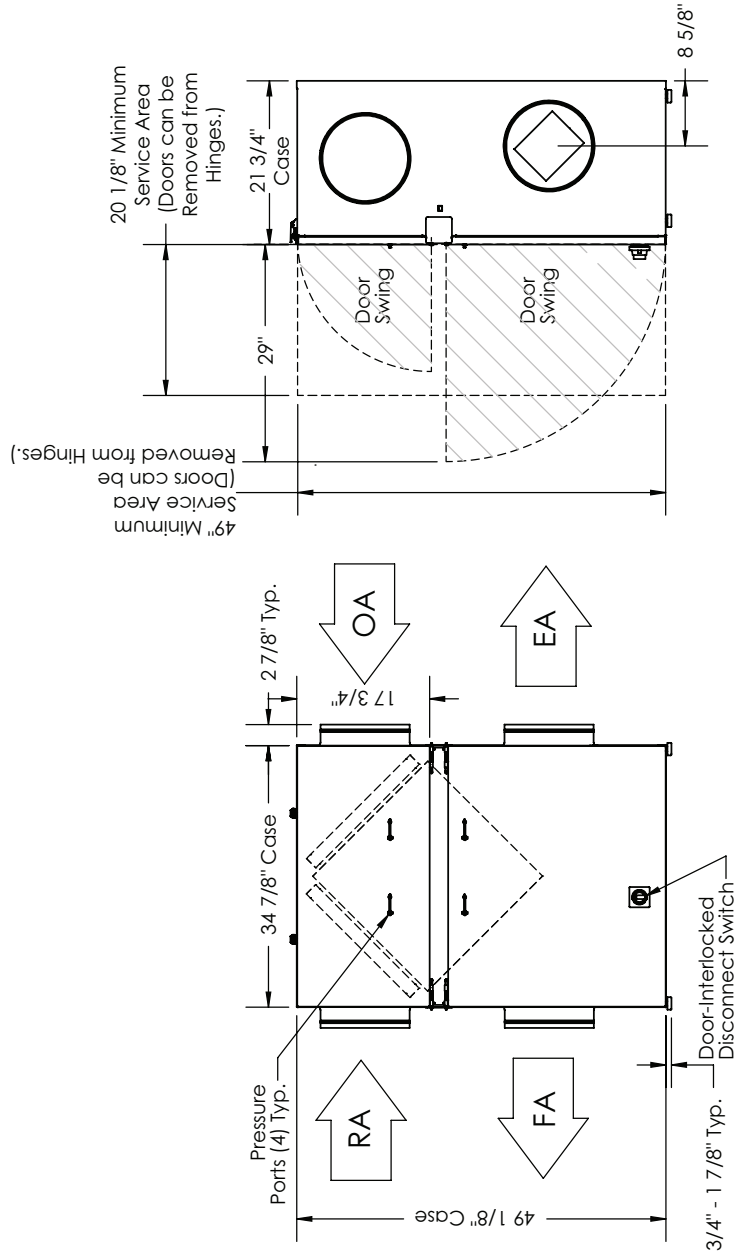
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.



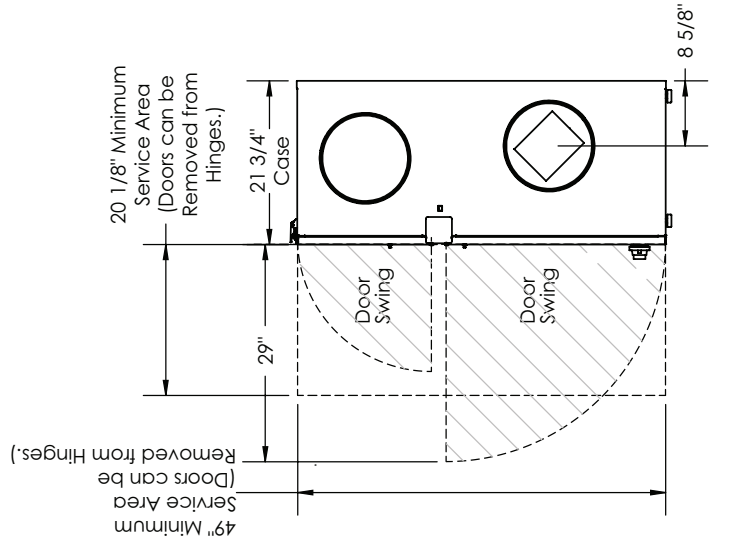
TOP VIEW



LEFT VIEW



FRONT VIEW



RIGHT VIEW

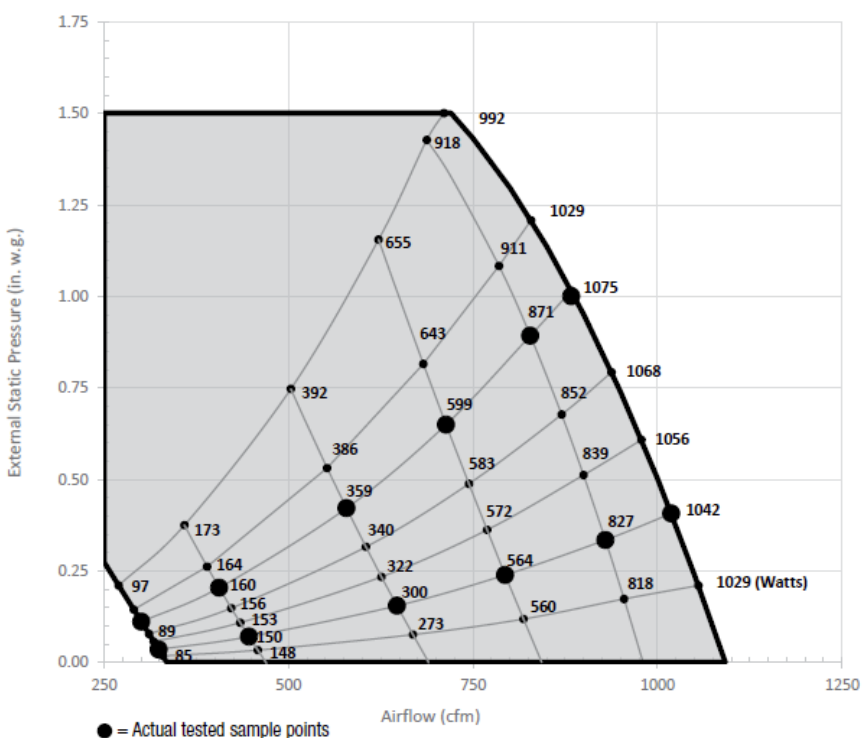
# TRCe800V



## Specifications

Ventilation Type: Static Plate, Heat and Humidity Transfer					
Typical Airflow Range: 250-1,100 CFM					
AHRI 1060 Certified Core: One L125-G5					
Airflow Rating Points (for AHRI): 750 CFM and 563 CFM					
Motors: Two, 0.5 HP, Direct Drive EC blower/motor package					
V	Hz	Phase	FLA (per motor)	Min. Cir. Amps	Max. Overcurrent Protection Device
120	60	Single	8.1	18.2	25
208-230	60	Single	4.8	10.8	15
Standard Features: Non-Fused Disconnect 24 VAC Transformer/Relay Package					
Filters: Two total, MERV 8, 2" pleated, 20" x 20" nominal size					
Weight: 207 lbs (unit), 325 lbs (shipping weight, on pallet)					
Shipping Dimensions: 30" L x 42" W x 71" H					

## Performance

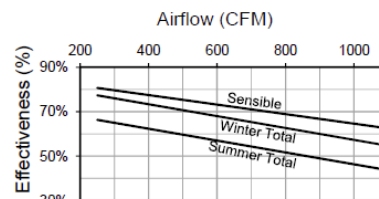


## Core Performance

Airflow CFM	ESP in H <sub>2</sub> O	Watts
324	0.04	86
446	0.07	150
647	0.15	300
794	0.24	564
929	0.33	827
1019	0.41	1042
300	0.11	91
406	0.20	160
579	0.42	359
713	0.65	599
828	0.89	871
883	1.00	1075

Note: Watts is for the entire unit.

Note: Airflow performance includes effect of clean, standard filter supplied with unit.



At AHRI 1060 standard conditions. See all AHRI certified ratings at [www.ahrinet.org](http://www.ahrinet.org).



# TRCe800V

## Dimensions

### ABBREVIATIONS

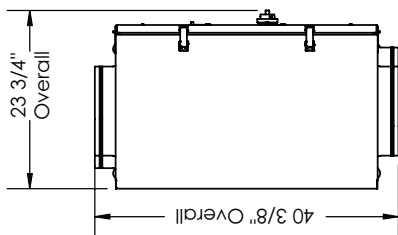
EA: Exhaust Air to Outside  
OA: Outside Air Intake  
RA: Room Air to be Exhausted  
FA: Fresh Air to Inside

### INSTALLATION ORIENTATION

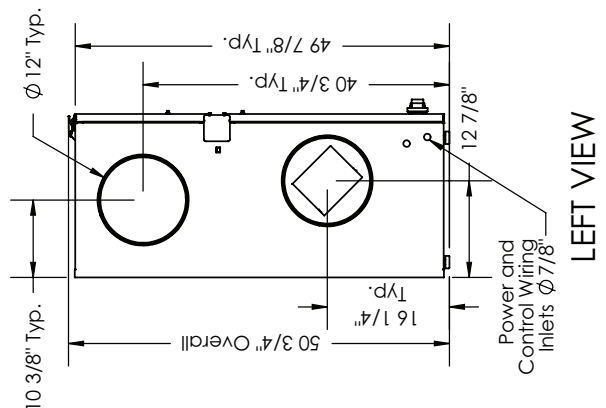
Unit may be installed in any orientation.

### NOTE

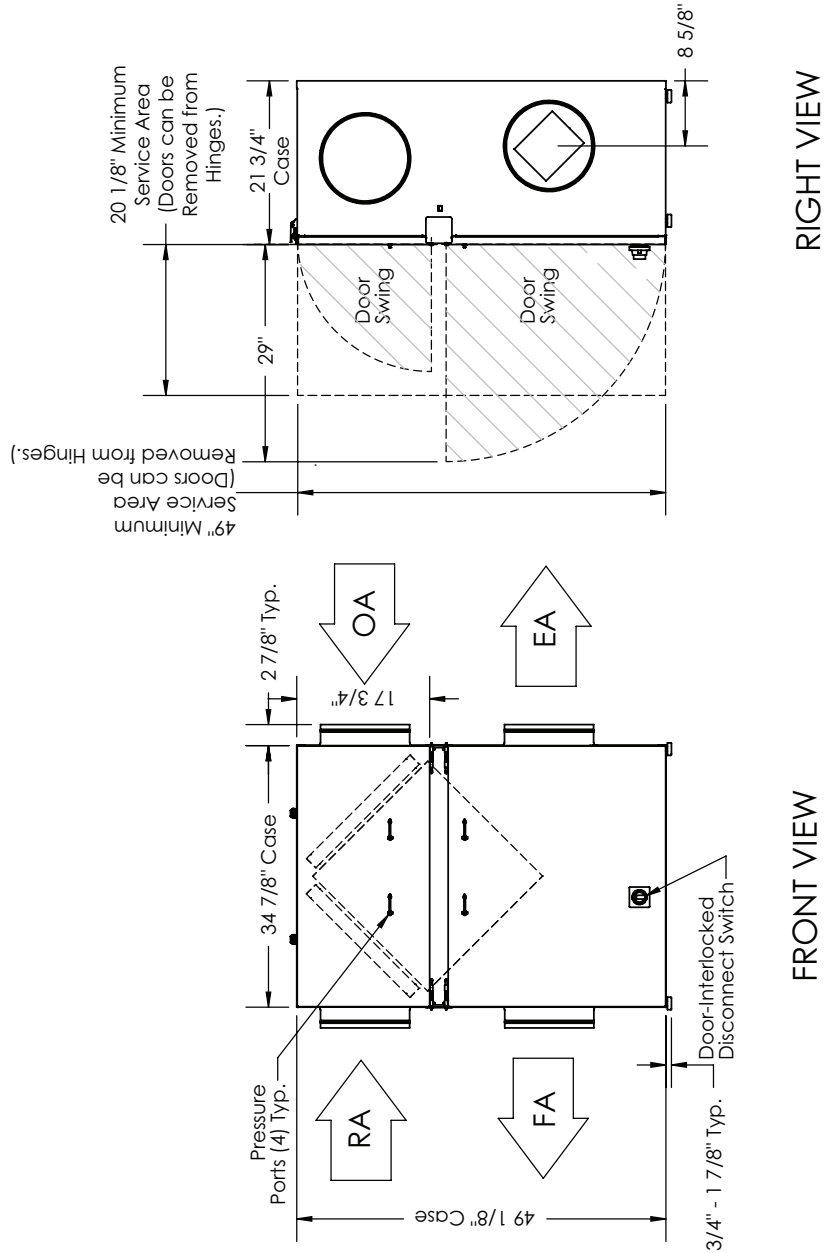
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.



TOP VIEW

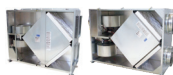


LEFT VIEW



FRONT VIEW

RIGHT VIEW

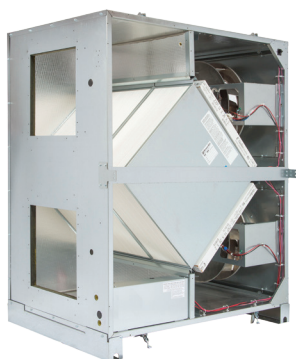


**MODEL TRC**

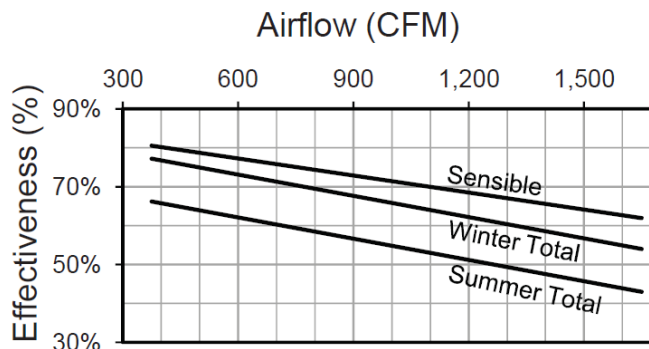
TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS

**JencoFan**

## TRC1200



## Performance



\* At AHRI 1060 standard conditions. See all AHRI certified ratings at [www.ahrinet.org](http://www.ahrinet.org).

## Specifications

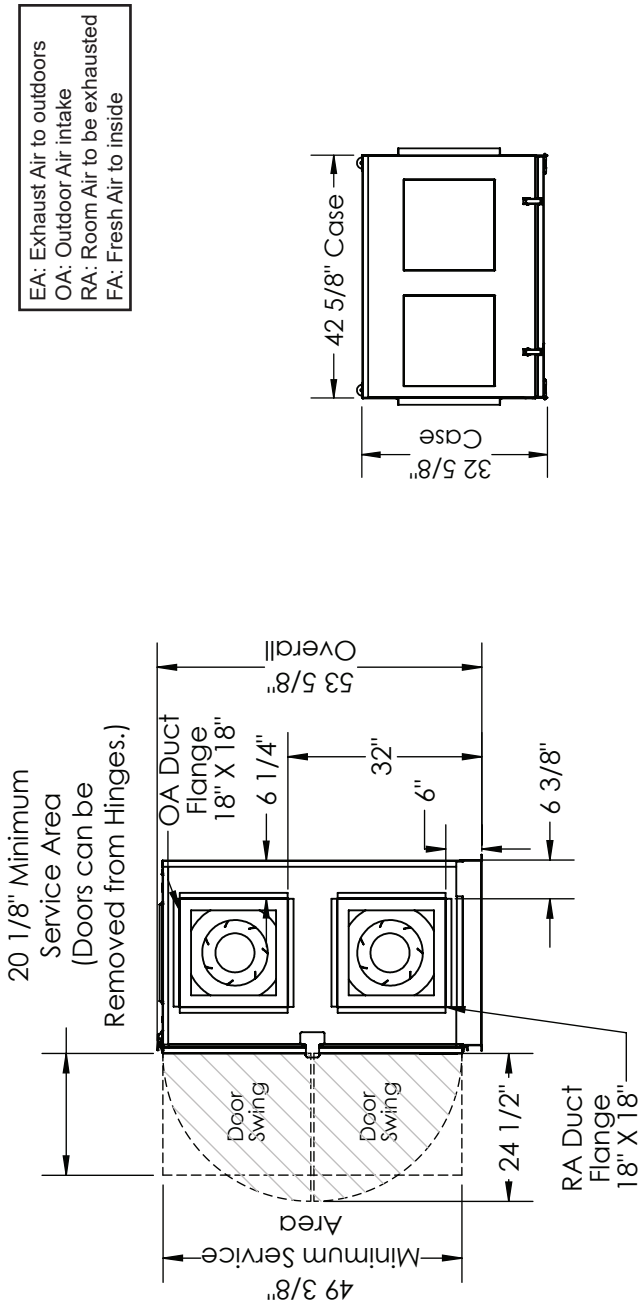
Ventilation Type: Static Plate, Heat and Humidity Transfer						
Typical Airflow Range: 375-1,575 CFM						
AHRI 1060 Certified Cores: One L62-G5 and one L125-G5						
Motors: Qty 2, 1.0 HP ea., Direct Drive motorized impeller packages						
Drive HP	V	Hz	Phase	FLA (per motor)	Min. Cir. Amps	Max. Overcurrent Protection Device
1.0	120	60	Single	6.5	14.6	20
	208-230	60	Single	3.3-3.4	7.7	15
	208-230	60	Three	2.2-2.2	5.0	15
	460	60	Three	1.1	2.5	15
Standard Features: 24 VAC Transformer/Relay Package						
Filters: Total Qty. 4, MERV 8: (2) 14" x 20" x 2" and (2) 16" x 20" x 2"						
Dimensions & Weight: 45 1/8" L x 33 1/2" W x 53 5/8" H, 337 lbs.						
Shipping Dimensions & Weight (on pallet): 70" L x 47" W x 58 5/8" H, 403 lbs.						

## Airflow Performance

Motor HP Phase	External Static Pressure (Inches Water Column)						
	0.0	0.25	0.50	0.75	1.00	1.25	1.50
1.0 Single Phase	1,575 CFM	1,470 CFM	1,350 CFM	1,225 CFM	1,090 CFM	950 CFM	795 CFM
	1,545 Watts	1,525 Watts	1,500 Watts	1,475 Watts	1,435 Watts	1,380 Watts	1,300 Watts
1.0 Three Phase	1,675 CFM	1,570 CFM	1,435 CFM	1,280 CFM	1,115 CFM	940 CFM	760 CFM
	1,410 Watts	1,400 Watts	1,380 Watts	1,340 Watts	1,280 Watts	1,210 Watts	1,135 Watts

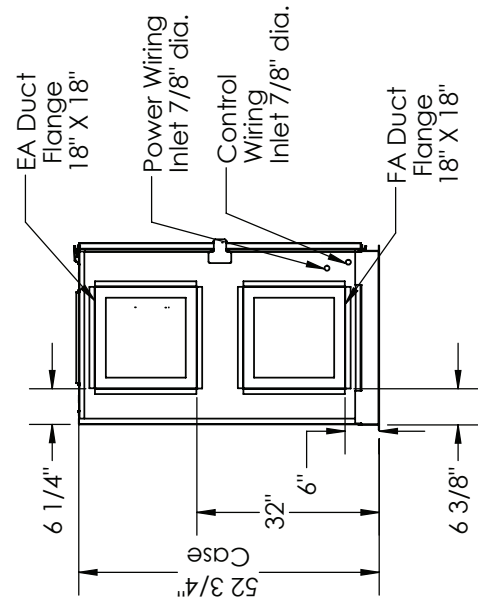
**TRC1200**

## Dimensions

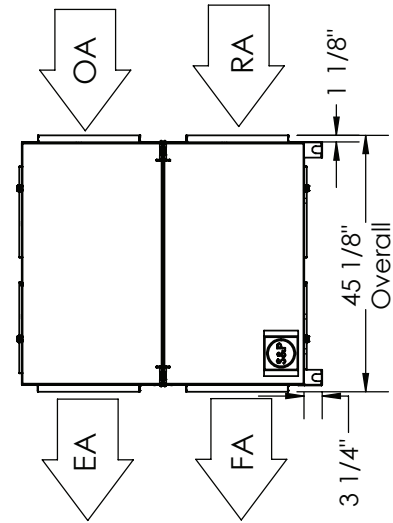


RIGHT VIEW

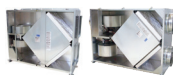
TOP VIEW



LEFT VIEW



FRONT VIEW

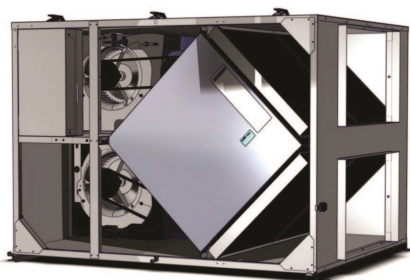


**MODEL TRC**

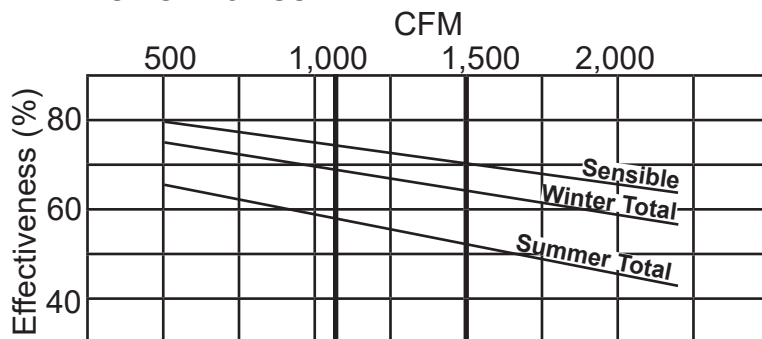
TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS

**JencoFan**

## TRC1600



## Performance



\* At AHRI 1060 standard conditions  
(see certified data on page 69 for core components.)

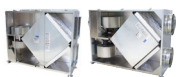
## Specifications

Ventilation Type: Static Plate, Heat and Humidity Transfer						
Typical Airflow Range: 500-2,025 CFM						
AHRI 1060 Certified Core: Two L125-00						
Airflow Rating Points (for AHRI): 1,500 CFM and 1,126 CFM						
Number Motors: Two belt drive blower/motor packages with adjustable sheaves						
Drive HP	V	Hz	Phase	FLA (per motor)	Min. Cir. Amps	Max. Overcurrent Protection Device
1.5	115	60	Single	15.2	34.2	45
	208-230	60	Single	8.2-7.6	18.5	25
	208-230	60	Three	4.6-4.8	10.8	15
	460	60	Three	2.4	5.4	15
Standard Features: Totally Enclosed Premium Efficiency Motors Motor Starters, 24 VAC Transformer/Relay Package						
Filters: Four total, MERV 8, 2" pleated, 20" x 20" nominal size						
Weight: 414 lbs (unit), 505 lbs (shipping weight, on pallet)						
Shipping Dimensions: 72" L x 48" W x 40" H						

## Airflow Performance

Motor HP	Blower RPM	Turns Open	External Static Pressure (in w.g.)													
			0.0		0.25		0.5		0.75		0.9		1.25		1.5	
			SCFM	BHP	SCFM	BHP	SCFM	BHP	SCFM	BHP	SCFM	BHP	SCFM	BHP	SCFM	BHP
1.5	1148	4	1592	0.7	1480	0.7	1320	0.6	1120	0.5	800	0.4	-	-	-	-
	1304	2	1809	1.0	1720	1.0	1600	0.9	1410	0.8	1250	0.7	975	0.6	630	0.4
	1460	0	2025	1.5	1950	1.4	1845	1.3	1715	1.2	1540	1.1	1400	1.0	1165	0.8

Note: Brake Horse Power (BHP) is for one blower motor package only.



MODEL TRC

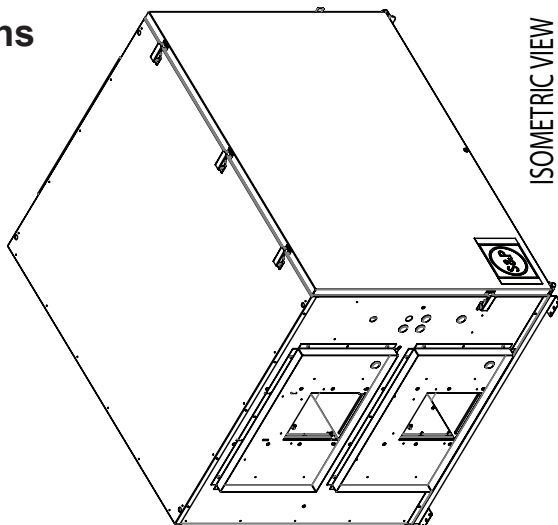
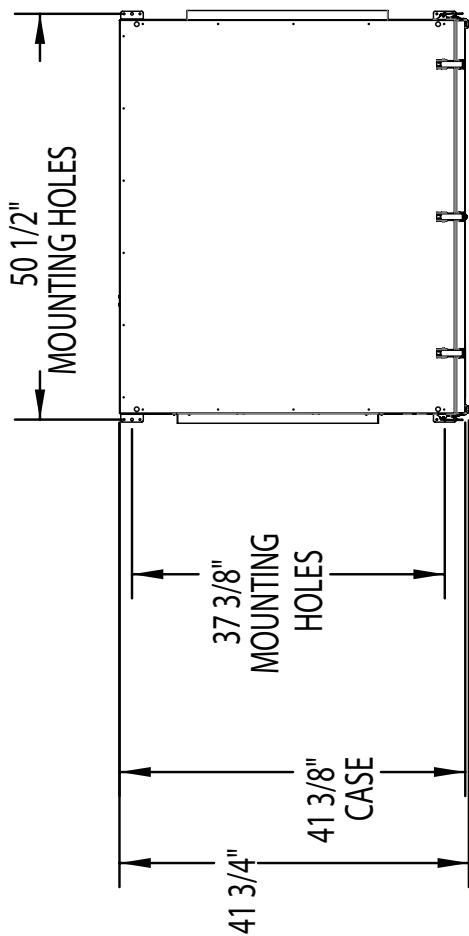
TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS

JencoFan

## TRC1600

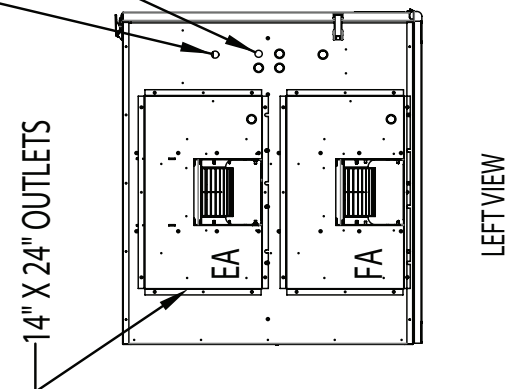
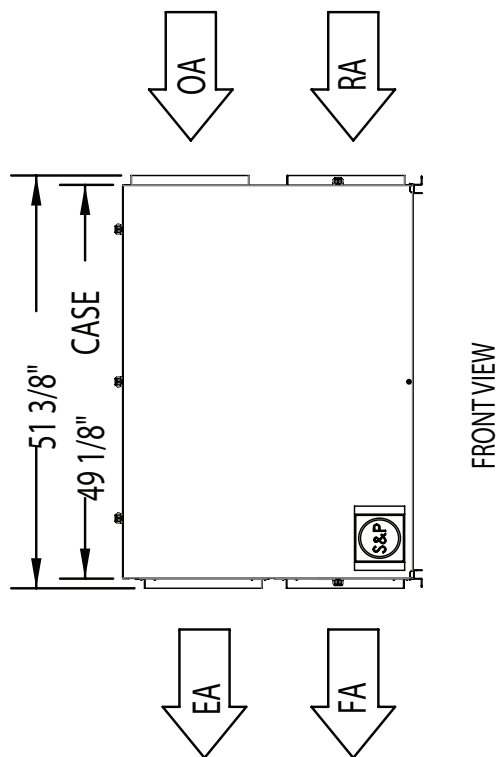
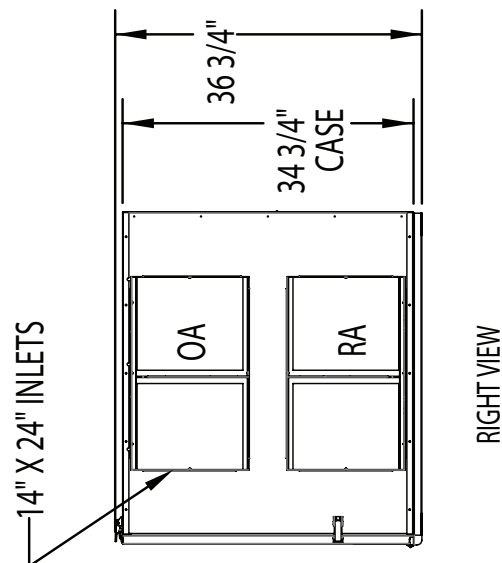
### Dimensions

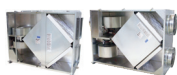
EA: Exhaust Air to outdoors  
OA: Outdoor Air intake  
RA: Room Air to be exhausted  
FA: Fresh Air to inside



Ø 7/8" CONTROL WIRING

Ø 7/8" POWER WIRING





**MODEL TRC**

TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS

**JencoFan**

## AHRI 1060-2005 - CERTIFIED PERFORMANCE

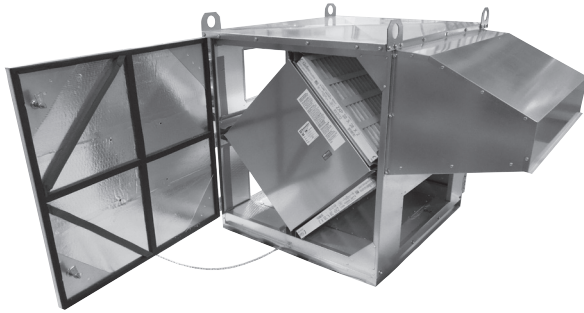
AHRI-1060 Certified Performance - Model Number L85-G5 (used in TRC500)													
Type			Tilt Angle				Nominal Airflow				Pressure Drop		
Plate			N/A				100% - 450 SCFM				0.6 in. H <sub>2</sub> O		
							75% - 338 SCFM				0.5 in. H <sub>2</sub> O		
Leakage Ratings					Thermal Effectiveness Ratings at 0" Pressure Differential								
	Pressure Differential	EATR	OACF	Purge Angle or Setting	Nominal Airflow		Sensible	Latent	Total	Net Airflow	Net Sensible	Net Latent	Net Total
Test 1	-1 in. H <sub>2</sub> O	1.0%	1.00	N/A	450 CFM	Heating	73%	53%	66%	450 CFM	73%	53%	66%
Test 2	0 in. H <sub>2</sub> O	0.0%	1.02	N/A		Cooling	73%	46%	56%		73%	46%	56%
Test 3	1 in. H <sub>2</sub> O	0.0%	1.05	N/A	338 CFM	Heating	77%	60%	71%	338 CFM	77%	60%	71%
						Cooling	77%	52%	61%		77%	52%	61%

AHRI-1060 Certified Performance - Model Number L125-G5 (used in TRC800, TRC1200 & TRC1600)													
Type			Tilt Angle					Nominal Airflow			Pressure Drop		
Plate			N/A					100% - 750 SCFM			0.65 in. H <sub>2</sub> O		
								75% - 563 SCFM			0.45 in. H <sub>2</sub> O		
Leakage Ratings					Thermal Effectiveness Ratings at 0" Pressure Differential								
	Pressure Differential	EATR	OACF	Purge Angle or Setting	Nominal Airflow		Sensible	Latent	Total	Net Airflow	Net Sensible	Net Latent	Net Total
Test 1	-1 in. H <sub>2</sub> O	1.0%	1.00	N/A	750 CFM	Heating	71%	52%	64%	750 CFM	71%	52%	64%
Test 2	0 in. H <sub>2</sub> O	0.0%	1.02	N/A		Cooling	71%	43%	53%		71%	43%	53%
Test 3	1 in. H <sub>2</sub> O	0.0%	1.05	N/A	563 CFM	Heating	75%	59%	69%	563 CFM	75%	59%	69%
						Cooling	75%	50%	59%		75%	50%	59%

NOTE: SCFM = Standard Cubic Feet per Minute OACF = Outdoor Air Correction Factor EATR = Exhaust Air Transfer Ratio N/A = Not Applicable

Energy recovery components certified in accordance with AHRI Standard 1060-2005.  
Actual Performance in packaged equipment may vary.



**10-YEAR**  
Core Warranty**AHRI** CERTIFIED™**MODEL FEATURES**

- MERV-8 filters
- Fully insulated case
- Large cores for high efficiency
- No condensate pan or drain required
- AHRI Certified
- Rainhood included
- Access door for easy maintenance and Cleaning
- Integral lifting lugs

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**MODEL OVERVIEW**

The Models CRT consist of an insulated sheet metal cabinet with 2, 3 or 4 ERV cores and MERV 8 filters. These roof mounted cabinets are designed for retrofit or new construction applications where space for an ERV does not meet the requirements. The CRT provides cost effective energy recovery with the flexibility in location of the supply and exhaust blowers.

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**STANDARD FEATURES**

- G5 - AHRI Certified performance data for efficiency and cross leakage
- Ten year core performance warranty
- No liquid water (condensate) or accompanying drain line to deal with - as with many competing brands
- Hinged and latched access door to ERV cores with airtight outdoor exposure compression seals
- Built-in pressure ports with captive plugs allowing cross-core pressure measurement and accurate airflow measurement
- Rainhood standard, ships assembled with unit
- One inch thick dense fiberboard insulation with scrimmed foil facing - washable, durable and easy to maintain - no loose insulation fibers to break off and enter the airstreams
- UL tested flammability and smoke generation that meets NFPA 90A and 90B test standards for commercial applications
- MERV 8, 2" pleated, 20"x20" nominal size filters as follows:
  - C2XRT: Four total, two for each airstream
  - C3XRT: Six total, three for each airstream
  - C4XRT: Eight total, four for each airstream

**10-year industry best core warranty. 2-year warranty on balance of unit.**

All specifications are subject to change without notice unless approved in submittal by JencoFan.

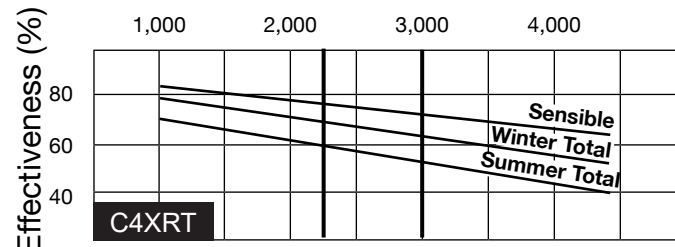
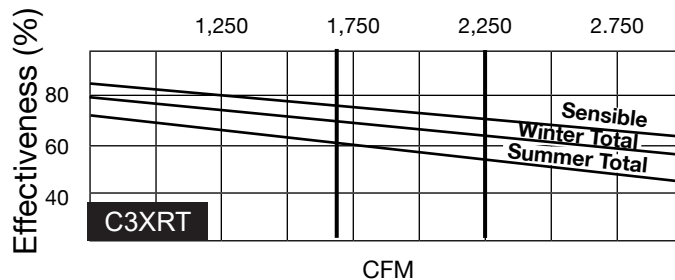
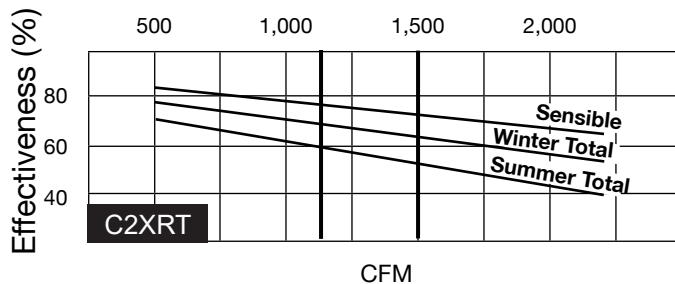




## SPECIFICATIONS

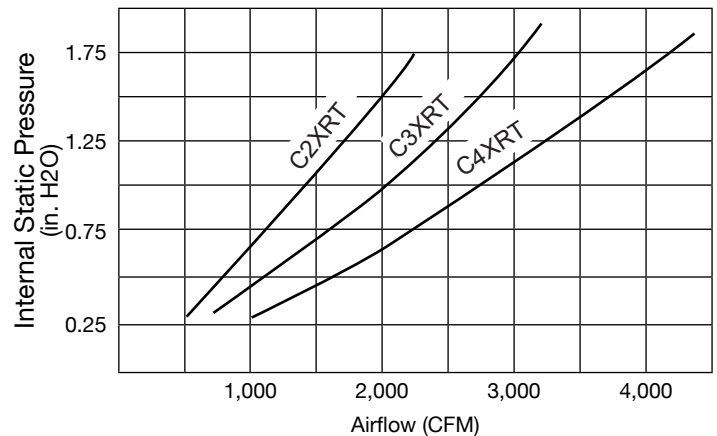
Ventilation Type: Static Plate, Heat and Humidity Transfer			
Insulated sheet metal cabinets with energy exchange cores and filters			
Individual CRT Series units can be built to larger air handling systems			
Blower not included and must be specified to meet job requirements			
Description	C2XRT	C3XRT	C4XRT
Typical Airflow Range CFM	500-2,200	750-3,300	1,000-4,000
AHRI 1060 Certified Core	Two (2) L125-00	Three (3) L125-00	Four (4) L-125-00
Airflow Rating Points (for AHRI)	1,500 and 1,120 CFM	2,250 and 1,690 CFM	3,000 and 2,250 CFM
Unit Weight	250 lbs	377 lbs	462 lbs
Shipping Weight	310 lbs	477 lbs	562 lbs
Filters: MERV 8, 2" pleated 20" x 20" nominal sizes	Four (4) Total	Six (6) Total	Eight (8) Total
Shipping Dimensions (W x L x H)	62" x 48" x 48"	62" x 96" x 48"	62" x 96" x 48"
Insulation: One inch, high density, FSK faced, fiberglass			
Options: Double wall construction			

### G5 Core Performance



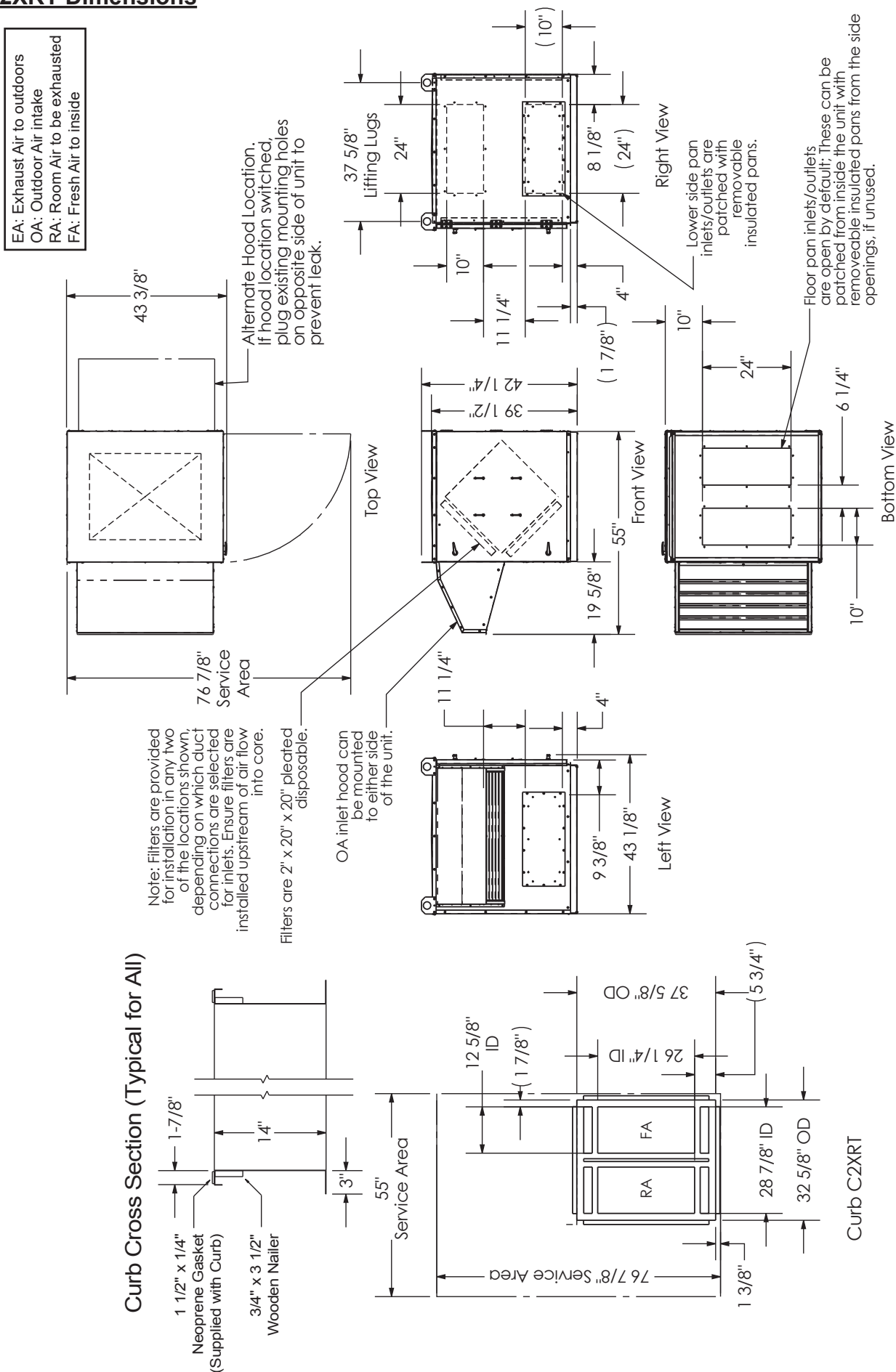
\*At AHRI 1060 standard conditions  
(Contact Factory for certified data for core components.)

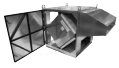
### Airflow Performance





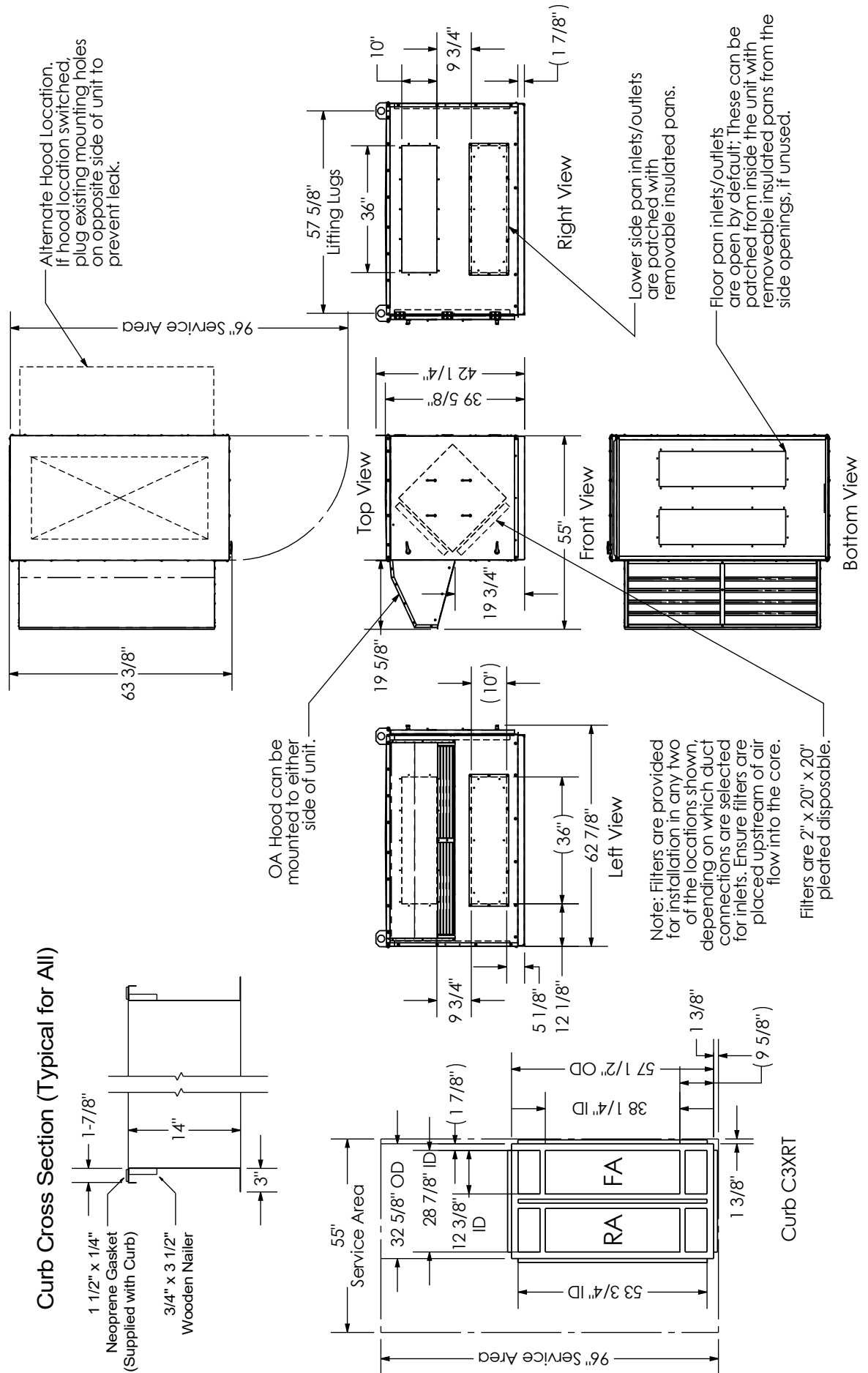
## C2XRT Dimensions

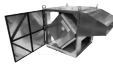




## C3XRT Dimensions

EA: Exhaust Air to outdoors  
OA: Outdoor Air intake  
RA: Room Air to be exhausted  
FA: Fresh Air to inside





# C4XRT Dimensions

EA: Exhaust Air to outdoors  
OA: Outdoor Air intake  
RA: Room Air to be exhausted  
FA: Fresh Air to inside

## Curb Cross Section (Typical for All)

