

# EV 450RT

ROOFTOP UNIT

## Energy Recovery Ventilator EC Motor Option



Energy Recovery Core is AHRI Certified®



### SPECIFICATIONS

**Ventilation Type:**

Static plate, heat and humidity transfer

**Typical Airflow Range:** 200-510 CFM

**AHRI 1060 Certified Core:** One L85-G5

**Standard Features:**

Non-fused disconnect  
24 VAC transformer/relay package

**Filters:**

Total qty. 2, MERV 8: 14" x 20" x 2"

**Unit Weight:**

187-246 lbs., varies by option(s)

**Max. Shipping Dimensions & Weight (on pallet):**

96" L x 47" W x 25" H  
350 lbs.

**Motor(s):**

Qty. 1, 0.5 HP, Direct drive EC blower/  
motor package

**Options:**

Fused disconnect  
Integrated programmable controls -  
enhanced, premium  
Qty. 2, Factory mounted filter alarms -  
both airstreams  
Double wall construction  
Exterior paint - white, custom colors

**Accessories:**

Filters - MERV 13, 2" (shipped loose)  
Automatic balancing damper - 4", 5", 6"  
Potentiometer speed control - remote installed  
RA/FA Horizontal plenum box  
- RTC/RTH configuration  
RA/FA Vertical and horizontal plenum box  
- RTR/RTF configuration  
Rooftop adapter transition paint - white,  
custom colors  
Roof curb - standard 14"  
Curb wind clip  
Engineered combo curb for Trane RTU  
Engineered combo curb for Carrier RTU  
Digital time clock - wall mount (TC7D-W),  
in exterior enclosure (TC7D-E)  
Carbon dioxide sensor/control -  
wall mount (CO2-W), duct mount (CO2-D)  
IAQ sensor - wall mount (IAQ-W),  
duct mount (IAQ-D)  
Motion occupancy sensor/control -  
ceiling mount (MC-C), wall mount (MC-W)  
Smoke Detector - duct mount (SD-D)  
Electric duct heater - EK series (1-175 kW);  
designed for indoor ductwork installation only

**Note:** Indirect Gas-Fired Duct Furnace is not available on the EV450RT.

### EC MOTOR OPTION OPERATING RANGE

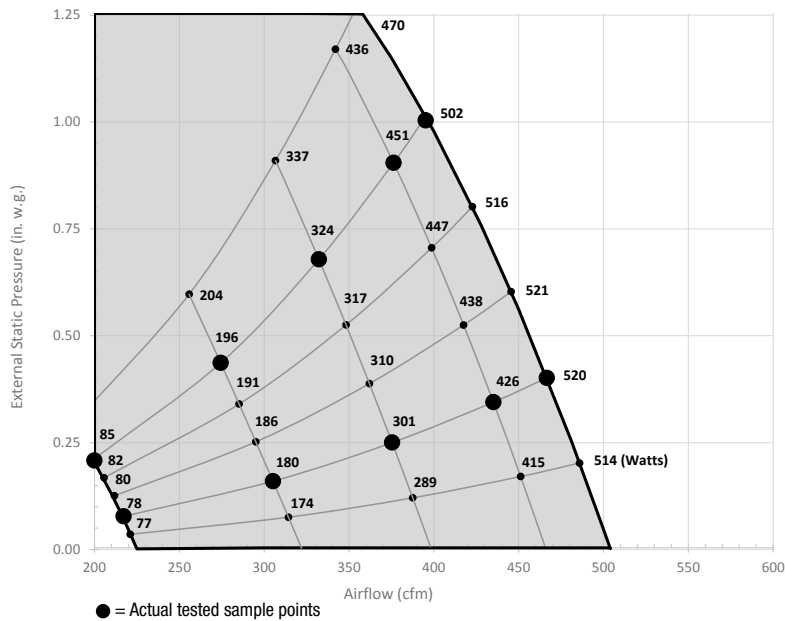
EV450RT EC MOTOR		
Sample Points Depicted in Larger Dots		
Airflow (CFM)	External Static Pressure (Inches Water Column)	Unit Power Consumption (Watts)
217	0.07	78
305	0.16	180
375	0.25	301
435	0.34	426
467	0.40	520
200	0.20	85
274	0.43	196
332	0.67	324
376	0.90	451
395	1.00	502

**Note:** Watts is for the entire unit.

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

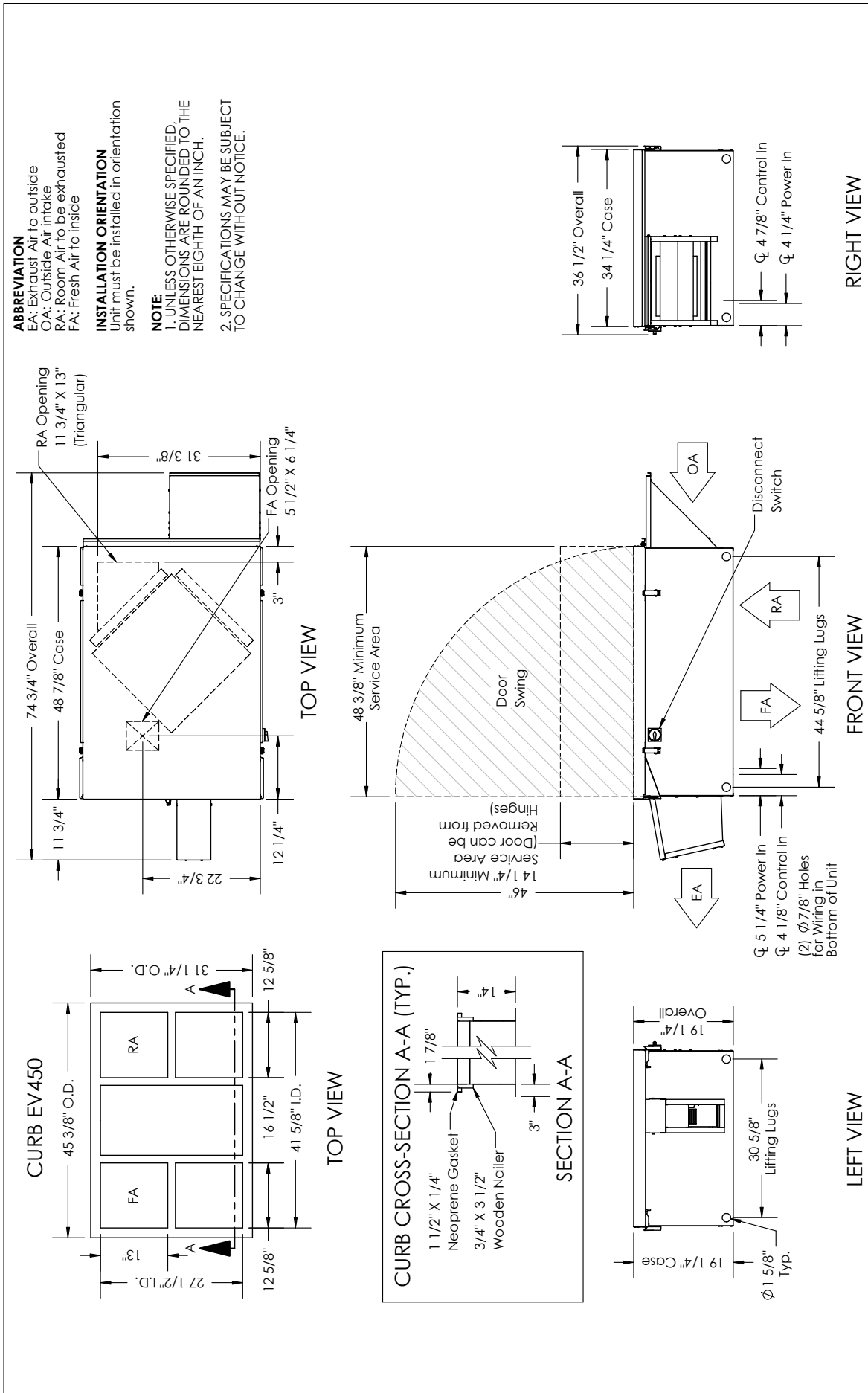
### ELECTRICAL DATA

HP	Volts	HZ	Phase	FLA	Min. Cir. Amps	Max. Overcurrent Protection Device
0.5	120	60	Single	8.1	10.1	15
0.5	208-230	60	Single	4.8	6.0	15



● = Actual tested sample points

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**UNIT MOUNTING & APPLICATION**  
 Must be mounted as shown. Airstreams can not be switched. Rooftop adapter accessories can be used to provide RTR and RTF (45RTRF) or RTH and RTC (45RTRCH) airflow.





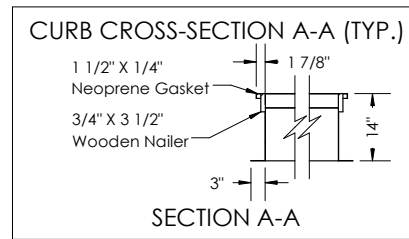
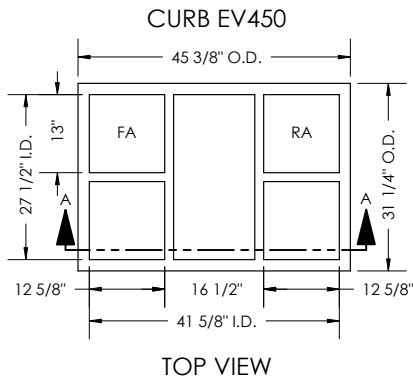
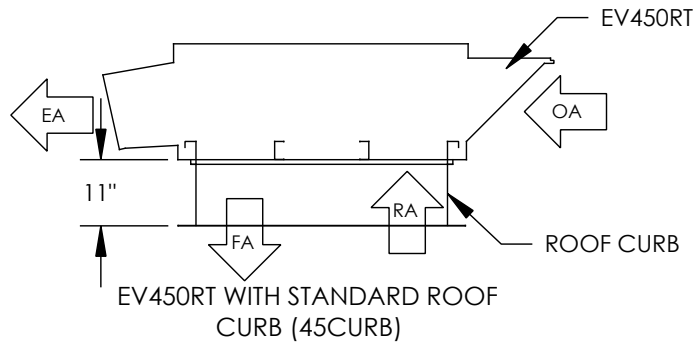
# 450RT

Energy Recovery Ventilator  
Standard or EC Motor Option

## DUCTING ACCESSORIES

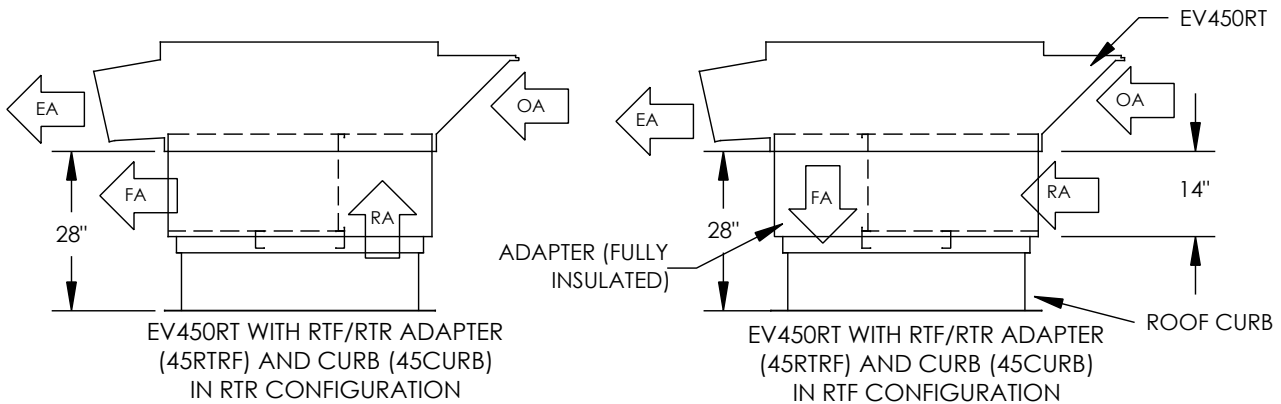
### Rooftop Curb (45Curb)

Standard roof curb shown (available option).



### Rooftop Adapter for RTR and RTF Orientations

For horizontal connection of either the Fresh Air duct or the Return Air duct, stack the optional RTF/RTR Adapter on the standard roof curb. Duct openings to be field cut into adapter. Opening location and size is flexible.





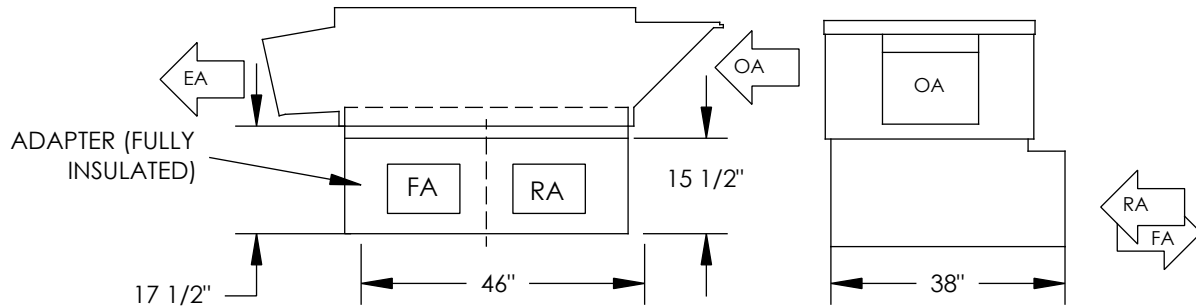
# 450RT

Energy Recovery Ventilator  
Standard or EC Motor Option

## DUCTING ACCESSORIES

### Rooftop Adapter for RTC and RTH Orientations

The RTH/RTC Adapter allows horizontal connection of both the Fresh Air and the Return Air ducts. It is also possible to connect the adapter directly to the return plenum of most rooftop units (openings must be cut into RTU). Duct openings to be field cut into adapter. Opening location and size is flexible.



EV450RT WITH ADAPTER (45RTCH)

### ABBREVIATIONS

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