



## SUBMITTAL COVER SHEET

### PROJECT

Cincinnati Classical Academy

### ENGINEER

Cunning and Associates

### ARCHITECT

Silverpeak Engineering

### SPECIFICATIONS NO.

### ITEM

Phase 2 - ERV

Submittal #: 022.1

- Approved  
 Disapproved

Date: 1/10/2025

Submitted by: David Day

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**SUBMITTAL**

Date:	9/16/2024
Project Name:	Cincinnati Classical Academy
Project Number:	O-173964
Job Location:	
Engineering Firm:	
Engineer:	
Contractor:	
Submittal Revision:	0

Unit Tags	Model
ERV-1	HE1.5JRTV-S35SS--DANT---L

**SUBMITTAL REVIEW**

Submitted By  
Name: \_\_\_\_\_  
Date: \_\_\_\_\_

Submission of information by the Contractor is taken as evidence that the Contractor has prepared the information for the specific application, and has verified that adequate and complete conditions for installation and subsequent operation and maintenance will exist.

Approved By  
Name: \_\_\_\_\_  
Approved By  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

Engineers review is for general conformance with the design concepts of the project, and for general compliance with the information given in the contract documents. The Contractor is responsible for access and clearance code compliance, work methods and conditions, coordination of trades, safety, all in satisfactory performance of work.

- Approved as Submitted
- Approved as Noted
- Rejected as Noted and Resubmit

- NO EXCEPTIONS TAKEN
- REJECTED-RESUBMIT
- EXCEPTIONS AS NOTED
- REVISE AND RESUBMIT

**CUNNING & ASSOCIATES MCE**

Once this submittal is approved or approved "as noted" a complete copy of this document must be returned to the RenewAire rep office before the equipment can be released for fabrication. An approval area has been provided for your convenience. Disapproval or approved "as noted" actions should be indicated on the appropriate individual submittal sheets.

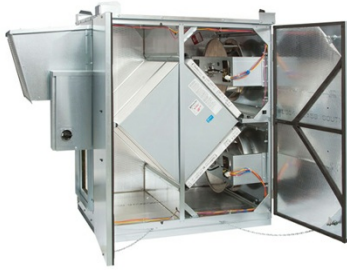
Date: Jan 21 2025

By: Norm Cunning

Date: 9/16/2024  
 Project Number: O-173964  
 Project Name: Cincinnati Classical Academy  
 Unit Tag: ERV-1  
 Model: HE1.5JRTV-S35SS--DANT---L  
 Qty: 1



### Specifications



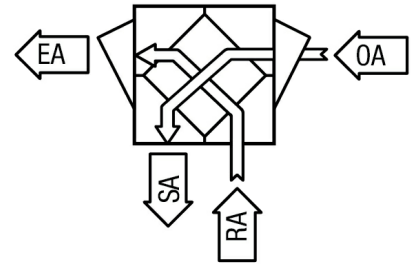
HE1.5XRTH shown

Ventilation Type:	Static plate, heat and humidity transfer
Typical Airflow Range:	375-1,650 CFM
AHRI 1060 Certified Core:	One L62-G5, One L125-G5
OA Filters:	Total Qty. 2, MERV 8: 14" x 20" x 2" and 16" x 20" x 2"
RA Filters:	Total Qty. 2, MERV 8: 14" x 20" x 2" and 16" x 20" x 2"
Unit Weight:	387-548 lbs. (varies by option)

### Configuration

Unit Tag	ERV-1
Model	[HE1.5] HE1.5
Core Type	[J] G5
Installation Location	[RT] Outdoor Unit
Airflow Orientation	[V] Orientation V
Wall	[S] Single (Standard)
Electrical Service	[35] 208-230V / 3 Phase / 60 HZ
Fresh Air Motor	[S] TEFC - Direct Drive Motorized Impeller (Standard)
Exhaust Air Motor	[S] TEFC - Direct Drive Motorized Impeller (Standard)
Flow Control	[D] Motorized Dampers Both Airstreams
Unit Control	[A] Single Contactor For Common Fan Control (Standard)
Shaft Grounding Rings	No
Disconnect	[N] Non Fused (Standard)
Control Option	[T] Transformer with Isolation Relay (Standard)
Filter Monitor	[-] None
Paint	[-] None
Safety Listing	[L] Listed

### Airflow Orientation



### Unit Accessories and Service Parts

Type	Part Number	Description	Quantity
Accessory	190101	CURB HE1.5RT	1

## SUMMER

## WINTER

	Outdoor Air	Return Air	Supply Air	Outdoor Air	Return Air	Supply Air
Standard Flow Rate <b>SCFM</b>	828*	1100	800	828*	1100	800
Actual Flow Rate <b>ACFM</b>	887*	1139	832	746*	1125	802
Dry Bulb °F	95.0	75.0	78.4	8.0	70.0	59.4
Wet Bulb °F	62.0	62.5	58.7	8.0	54.3	47.8
Enthalpy (H) <b>BTU/lb</b>	27.8	28.3	25.6	3.2	22.9	19.2
Moisture Ratio (MR) <b>grains/lb</b>	31.8	66.0	43.4	8.4	38.8	31.8
Supply Air - External Static Pressure <b>in w.g.</b>		1.22			1.22	
Exhaust Air - External Static Pressure <b>in w.g.</b>		0.78			0.78	
Sensible effectiveness %		82.8			82.8	
Total effectiveness %		57.0			81.3	
Enthalpy Recovery Ratio (ERR) % - 90.1 Compliance		57.0			81.3	
Moisture removed <b>grains/lb</b>		-11.6			-23.4	
	<b>Sen</b>	<b>Lat</b>	<b>Tot</b>	<b>Sen</b>	<b>Lat</b>	<b>Tot</b>
Original load <b>BTUH [Tons]</b>	17280 [1.4]	19080 [1.6]	36360 [3.0]	53568	17173	70741
Load with RenewAire <b>BTUH [Tons]</b>	2965 [0.2]	12686 [1.1]	15652 [1.3]	9192	4010	13202
Total energy saved <b>BTUH [Tons]</b>	14315 [1.2]	6393 [0.5]	20708 [1.7]	44376	13164	57539

\*Note: OA Flow Rate values are gross airflow, all others are net airflow.

Note: For full certified ERV performance, please see AHRI 1060 Report.

Note: Sensible cooling design conditions were used for the summer performance results.

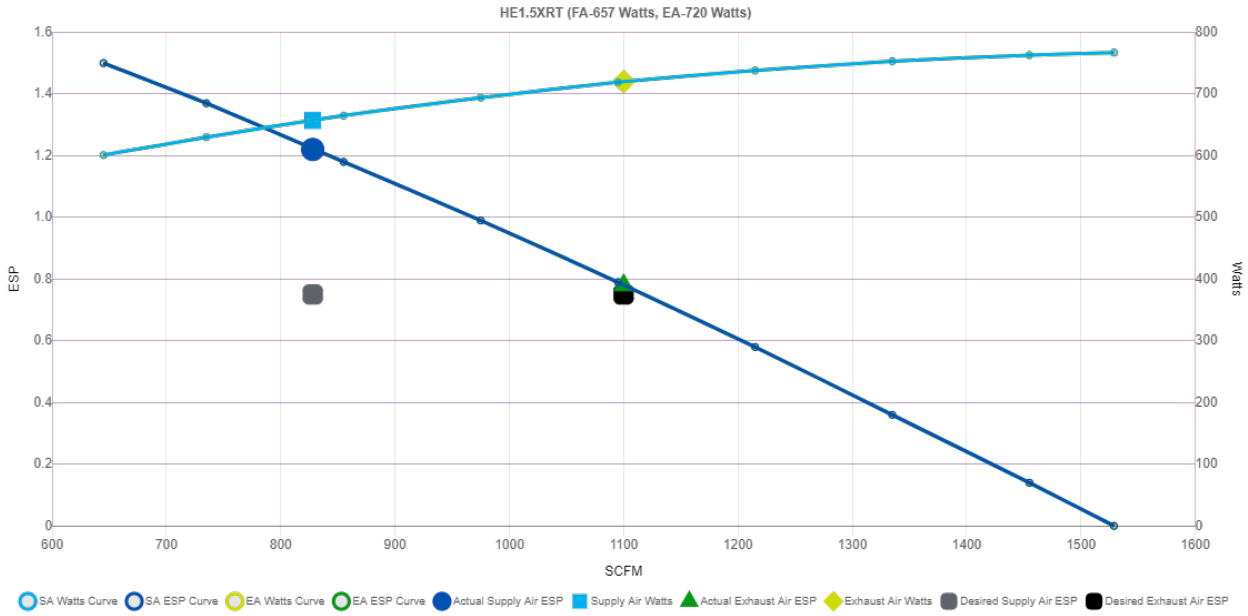
## Fans

	Gross CFM	ESP	Filters	Fan Speed (RPM)	Watts	Elevation	Motors Protected by Motor Starters		Motors Protected by VFDs	
							Qty @ W	FLA	Qty @ W	FLA
OA	828	1.22	2" MERV-8	1475	657	499	2@1.0	2.2-2.2	None	-
RA	1100	0.78	2" MERV-8	1475	720					

## Unit Electrical Data

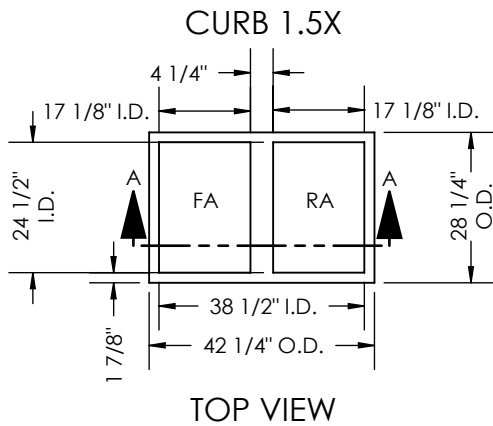
Volts	Hertz	Phase	MCA	MOP
208-230	60	3	5.0	15

## Fan Curve

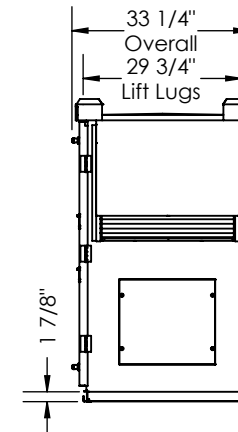
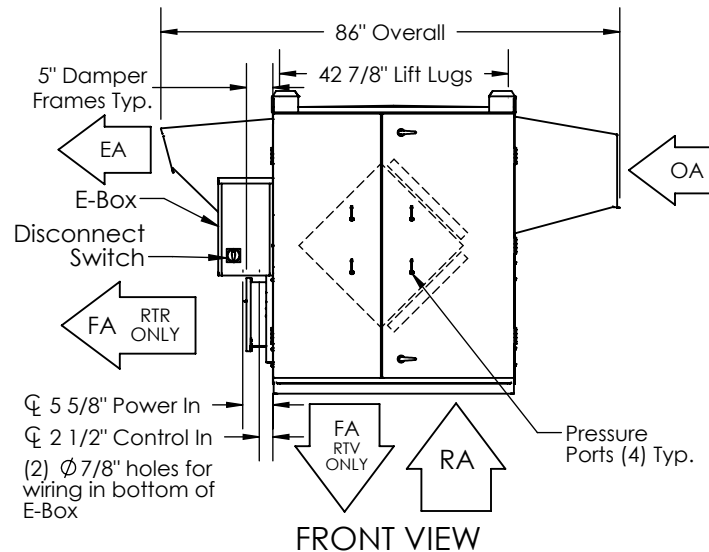
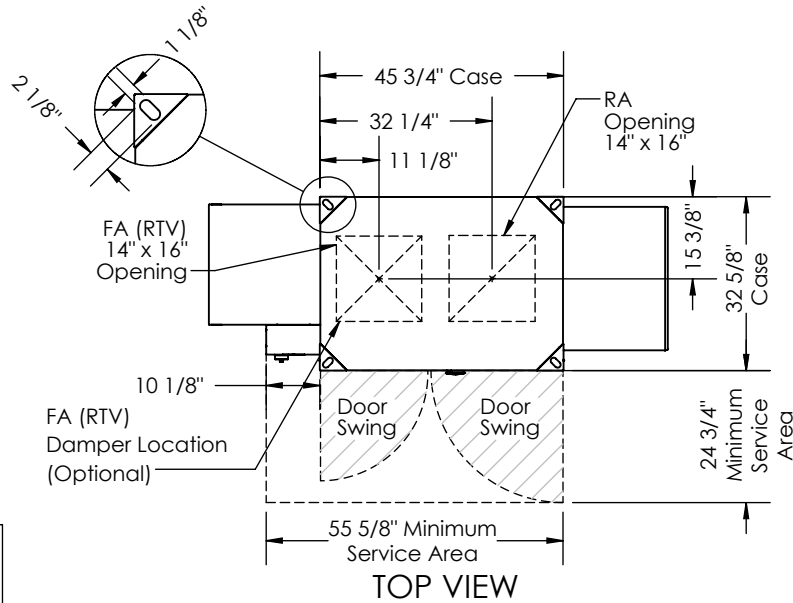
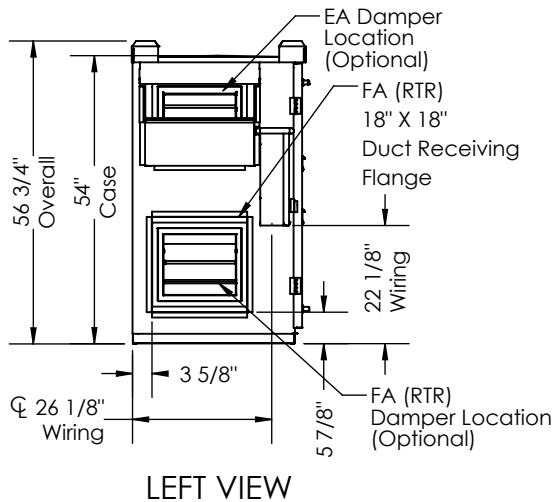
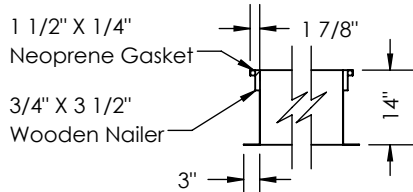


## System Fan Efficacy

CFM/Watt	Watt/CFM
0.58	1.72



**CURB CROSS-SECTION A-A (TYP.)**



**ABBREVIATIONS**

EA: Exhaust Air to outside  
 OA: Outside Air intake  
 RA: Room Air to be exhausted  
 FA: Fresh Air to inside  
 RTV: Rooftop Vertical RA & FA  
 RTR: Rooftop Vertical RA Only

**INSTALLATION ORIENTATION**

Unit must be installed in orientation shown.

**NOTE:**

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

2. SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE.