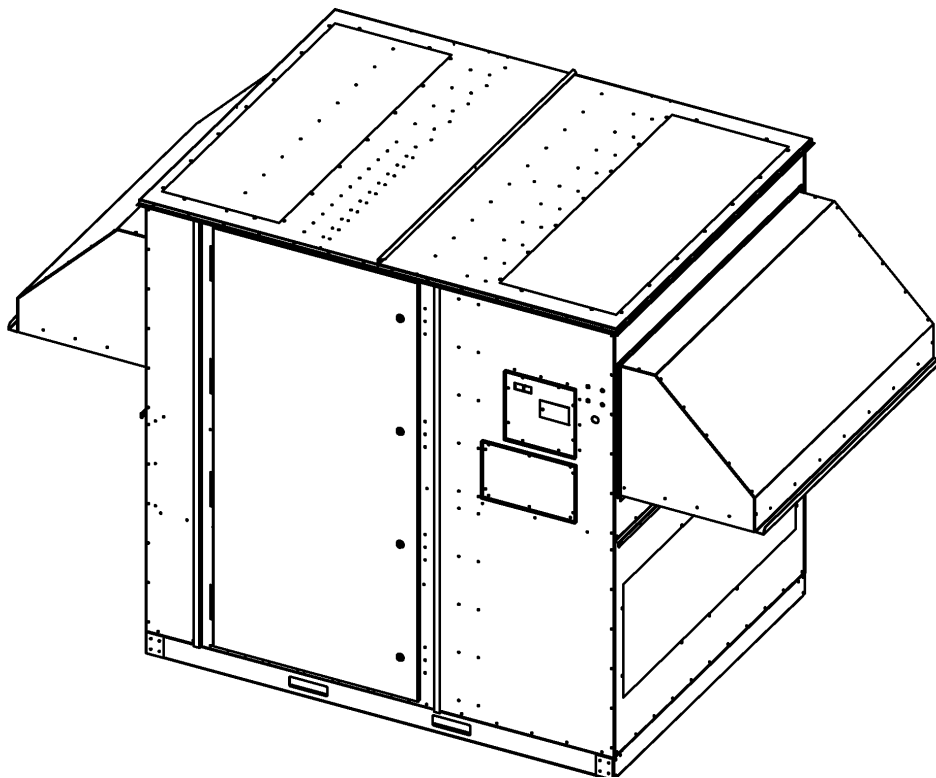


C Series Commercial Units

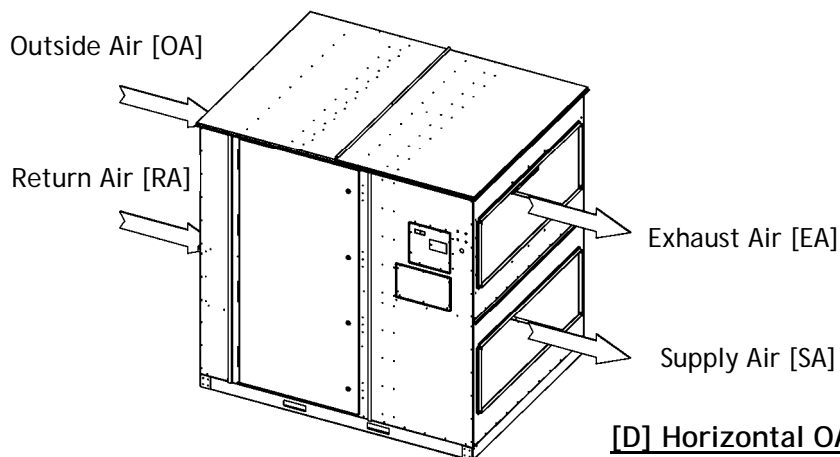
- Tailored solutions between 900 and 10,800 CFM
- Indoor and rooftop versions available
- Internal fans standard
- Heavy-duty steel construction
- Wide variety of options available for customized solutions
- AHRI Certified C500S Core



C Series Flow Configuration Examples

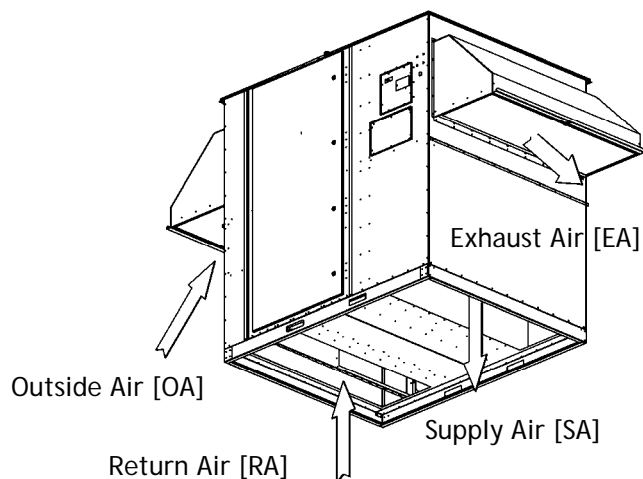
C Series units have many combinations of flow configurations including the examples below:

[H] All Horizontal—Indoor

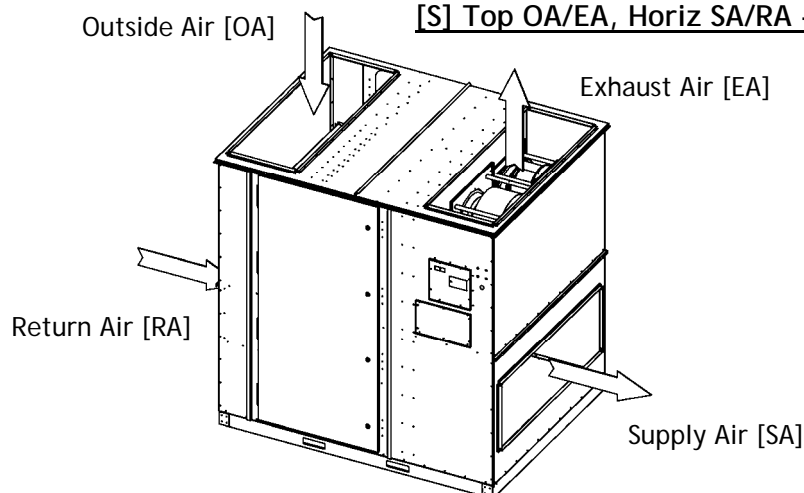


[D] Horizontal OA/EA, Down SA/RA - Rooftop

- Configuration Options**
- D - Horizontal OA/EA, Down SA/RA
 - E - Horizontal OA/RA/SA, Down RA
 - F - Horizontal OA/EA/RA, Down RA
 - G - Horizontal OA/SA/RA, Top EA
 - H - All Horizontal
 - J - Horizontal OA, Top EA, Down SA/RA
 - K - Horizontal OA/SA, Top EA, Down RA
 - L - Horizontal OA/RA, Top EA, Down SA
 - M - Horizontal EA/SA/RA, Top OA
 - N - Top OA, Horizontal EA, Down SA/RA
 - P - Top OA, Horizontal EA/SA, Down RA
 - R - Top OA, Horizontal RA, Down SA
 - S - Top OA/EA, Horizontal SA/RA
 - T - Top OA/EA, Down SA/RA
 - U - Top OA/EA, Horizontal SA, Down RA
 - V - Top OA/EA, Horizontal RA, Down SA



[S] Top OA/EA, Horiz SA/RA - Indoor



C Series Options

ERV-to-HVAC Transitions

For applications where the ERV unit is to be mated to the HVAC unit, transitions are available. Each transition is custom designed to connect to a specific HVAC unit. Transitions are insulated, shipped fully assembled and are constructed of pre-paint steel to match the finish of the HVAC unit and ERV unit. Balancing dampers are included with most transitions, allowing for airflow volume adjustment. Important note: Standard ERV transitions are not designed for 100% return / exhaust, though special 100% transitions are available.

Electrical Disconnects

Factory installed electrical disconnects are available for all ERV units. Disconnects are sized to handle the ERV unit and pre-heater (when ordered together). Both switched and fused disconnects are available.

Internal / Remote Timer

This option is a 24v (115v for remote) factory installed timer that allows the user to have the ERV run during certain times of the day or week.

Motorized Dampers

Two position motorized outside air and exhaust air dampers are available to eliminate the migration of unwanted outside air into the building space when the ERV unit is off. Motors are 24 volt and are factory installed and wired. Outside air and exhaust air dampers are ordered separately.

Smoke Detector

Use this option to completely shut down the ERV when smoke is detected in the ERV's exhaust air stream.

Remote Readout

This option is a remote panel that allows the user to see ERV alarms and operational status up to 1000 feet from the ERV cabinet.

Mirrored Image Cabinet

This option takes the selected ERV, and creates a mirrored (180 degree flip) version of the ERV cabinet

Frost Protection

Applications with extremely cold climates may use the frost protection option as a means of eliminating frost build up on the ConsERV™ core. When frost builds up on the ConsERV™ core, the outside air blower is temporarily shut off and the warmer exhaust air “defrosts” the core. Once the frost build up is eliminated, the outside air blower is reactivated. Note: frost protection is not recommended on units with pre-heaters.

Low Temperature Lockout

For applications where the ERV unit is to be locked out in extremely cold temperatures, the low temperature lockout option should be used. When outside air temperature is below set point the ERV unit is completely shutdown. Thermostat range goes down to minus 30 degrees F.

C Series Options

ERV Filter Maintenance Indicator Switch

Senses static pressure across outside air intake filters. Rising static pressure indicates filters need service. Connect to field supplied 24 volt indicator light.

NOTE: By request, the indicator can be set up for the return air filters (contact factory).

Outside Air and Exhaust Air Blower Maintenance Indicator Switch

This option monitors the amp draw for both the outside air and the exhaust air blowers / motors. If there is a electrical spike (i.e. the belt breaks), a signal is sent to a field supplied 24 volt indicator light that maintenance is required.

EzERV Program Option

This option provides an airflow monitoring station for the supply and exhaust airstreams. The ERV outside air intake, and exhaust air are measured with internal pressure sensors, a predetermined pressure curve is referenced to display current CFM levels on a LCD screen located inside the ERV cabinet. Airflow levels are now automated with this option and no adjustments are needed in order for the ERV to maintain set CFM levels. Also dirty filters and system effect will not affect CFM settings as long as ERV fans can overcome static pressures.

- **Offset Air CFM** - Outside air CFM and exhaust air CFM airflows are maintained by ERV. If CFM levels are to be changed simply dial in outside CFM levels. Then the user will dial in the offset air (amount of difference between the outside air and the exhaust air) and the ERV will maintain the exhaust air stream at this difference. This allows the user to be able to control building pressure without having to run tubing down into the building space to monitor building pressure.
- **Modulating CO2 Control w/ Offset CFM** - CFM airflows are maintained by ERV. The CO2 ppm will control how much CFM air enters the building. The user will need to setup the min/max CFM levels and min/max CO2 ppm levels inside the building by the ERV user interface on the cabinet. The ERV cabinet CFM will now modulate in between the max/min CFM setting based on CO2 levels inside building. A CO2 sensor is included with this option.
- **Modulating VOC (Volatile Organic Compound) Control w/ Offset CFM** - CFM airflows are maintained by ERV. The VOC voltage will control how much CFM air enters the building. User will need to set up min/max CFM levels and min/max VOC voltage levels inside the building by the ERV user interface on the cabinet. The ERV cabinet CFM will now Modulate in between the max/min CFM setting based on VOC voltage levels inside building. A VOC sensor is included with this option.
- **Building Pressure CFM Control** - CFM airflows are maintained by ERV. The building pressure sensor will control how much air leaves the building thus maintaining building pressure. The user will enter outside air CFM level and building pressure by the ERV user interface on the cabinet if parameters need to change. The unit comes with a 0.25" WC pressure sensor.
- **Building Pressure CFM Control w/ CO2 Sensor** - CFM airflows are maintained by ERV. The building pressure sensor will control how much air leaves the building thus maintaining building pressure. The user will enter outside air CFM level and building pressure by the ERV user interface on the cabinet if parameters need to change. The user will also enter the CO2 level that the supply will modulate in between the min/max settings based on CO2 control of outside air. A CO2 sensor is included with this option.
- **No Return Rooftop** - This option is used to turn an RTU mated to an ERV utilizing a combination curb, into a dedicated outside air unit with no building exhaust going through the curb. This option includes a temperature sensor, and the factory must be contacted before using this option.

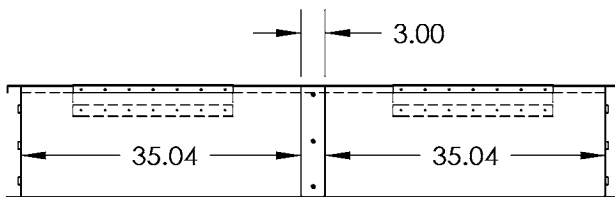
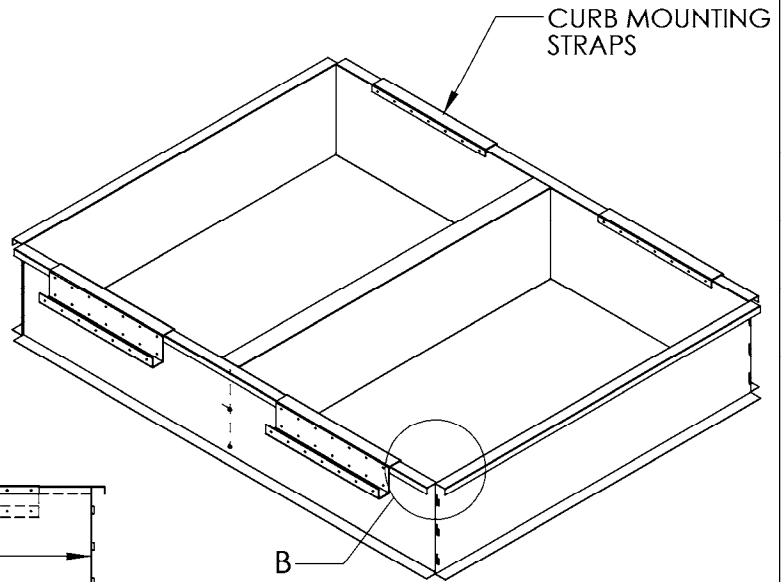
C Series Curb

Roof Curbs

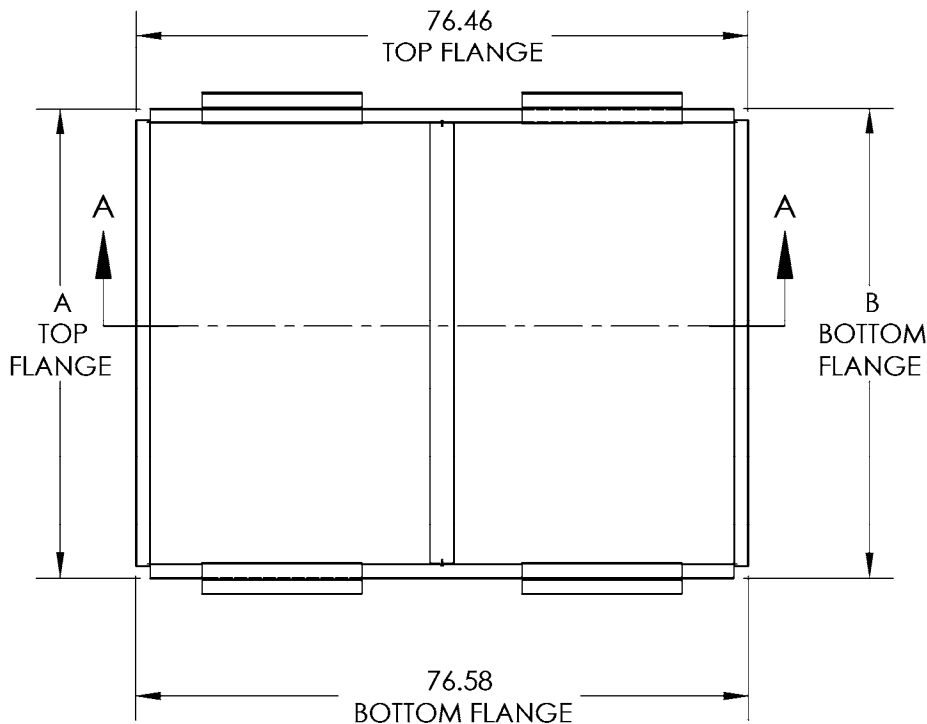
The ERV roof curbs are constructed of heavy gauge galvanized steel, and include a wood nailer and gasket package for a tight unit-to-curb seal. Standard curbs are 14" tall and are manufactured to NRCA specifications. Duct work can slide into the supply and return openings and hang from the top of the curb. Insulated deck pans and duct supports are provided. Vibration isolation curbs are available with 2" deflection springs and are shipped fully as-

NOTES:

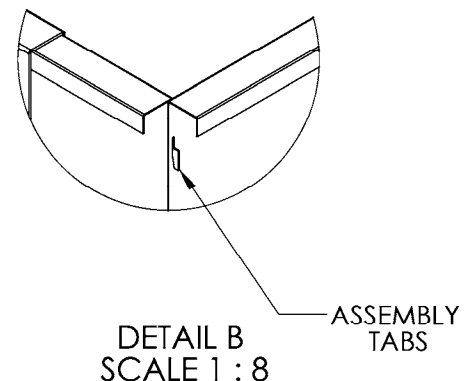
- STANDARD 14" TALL FLAT-ROOF CURB
- 18 GA. GALVANIZED STEEL CONSTRUCTION
- KNOCKDOWN CURB, SHIPPED DISASSEMBLED
- FULL PERIMETER WOOD NAILER IS PROVIDED
- 0.25" x 1.50" FOAM GASKET TAPE IS PROVIDED



SECTION A-A
SCALE 1 : 24



UNIT	A	B
CEVA	21.51	21.63
CEVB	33.88	34.01
CEVC	46.26	46.38
CEVD	58.63	58.76
CEVE	71.01	71.13
CEVF	83.38	83.51
CEVG	95.76	95.88
CEVH	108.13	108.26



C Series Electrical

The C Series system uses a combination of 400 mm and 500 mm fans to achieve the desired airflow at a given ESP [in-H₂O]. Use the fan curves on page 58–59 to select the proper size fans needed. The chart below provides the electrical ratings for each individual fan.

System Voltage	System Phase	400 mm Fan				500 mm Fan			
		Motor Voltage	Motor Phase	Motor HP	Motor Watt	Motor Voltage	Motor Phase	Motor HP	Motor Watt
115	1	230	1	1.04	775	n/a			
208	1	208	1	1.04	775	n/a			
208	3	208	3	1.18	880	208	3	3.62	2700
230	1	230	1	1.04	775	n/a			
230	3	230	3	1.18	880	230	3	3.62	2700
460	3	460	3	1.18	880	460	3	3.62	2700
575	3	460	3	1.18	880	460	3	3.62	2700

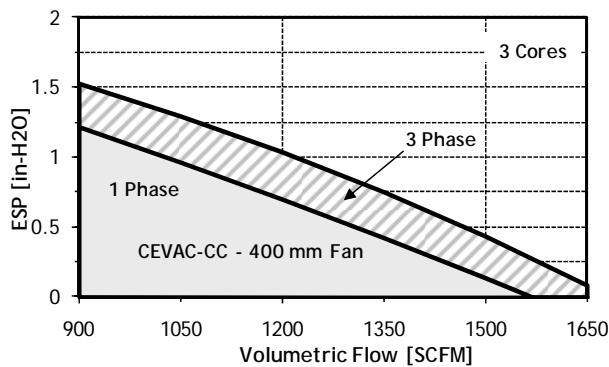
The chart below provides the nameplate electrical ratings.

Model	System Voltage	System Phase	FLA	MCA	MOP
CEVxx-CC (1) 400 mm fan per side	115	1	14.13	17.66	22.55
	208	1	7.81	9.77	12.47
	208	3	5.10	6.37	8.16
	230	1	7.07	8.83	11.28
	230	3	4.61	5.76	7.38
	460	3	2.31	2.88	3.69
	575	3	1.84	2.31	2.95
CEVxx-DD (2) 400 mm fans per side	115	1	27.61	34.51	44.46
	208	1	15.26	19.08	24.58
	230	1	13.80	17.26	22.23
CEV--EE (1) 500 mm fan per side	208	3	15.22	19.02	24.59
	230	3	13.76	17.20	22.24
	460	3	6.88	8.60	11.12
	575	3	5.50	6.88	8.90
CEV--FF (2) 500 mm fans per side	208	3	30.22	37.78	48.98
	230	3	27.33	34.16	44.30
	460	3	13.67	17.08	22.15
	575	3	10.93	13.67	17.72
CEV--GG (3) 500 mm fans per side	208	3	45.23	56.54	73.37
	230	3	40.90	51.13	66.35
	460	3	20.45	25.56	33.17
	575	3	16.36	20.45	26.54

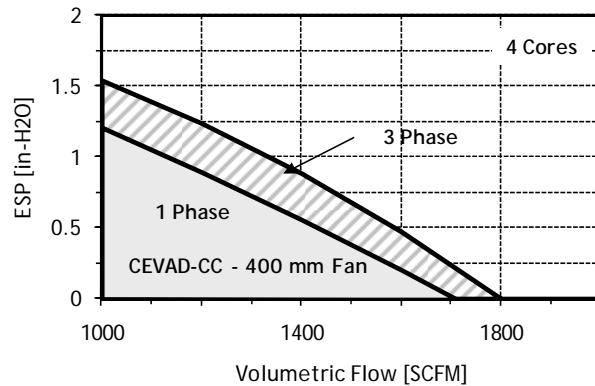
C Series Fan Systems

All C Series systems come standard with backward inclined centrifugal impellers with variable speed controls built in to allow field control of the unit flow rate up to the maximum capacity of the fan system. Each system can operate in the complete range underneath its given curve. 400 mm systems have both a single phase and a three phase option.

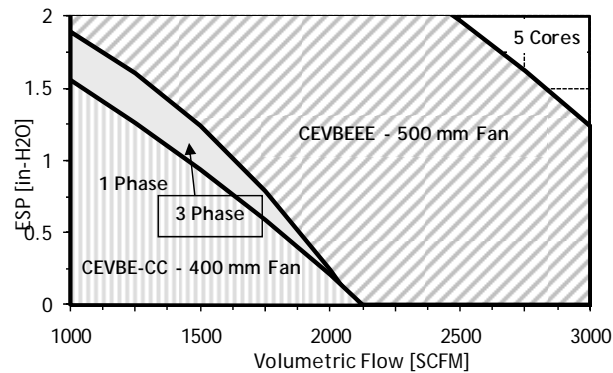
CEVAC-CC System



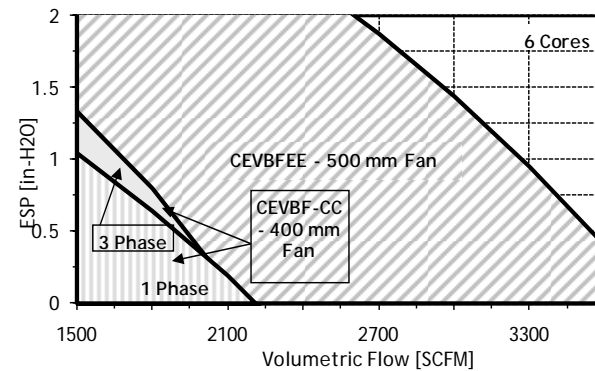
CEVAD-CC System



CEVBE-xx System

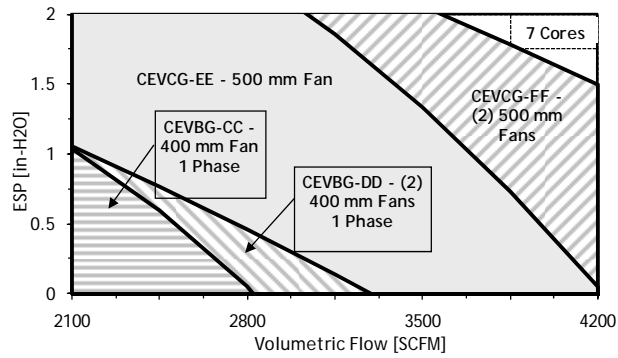


CEVBF-xx System

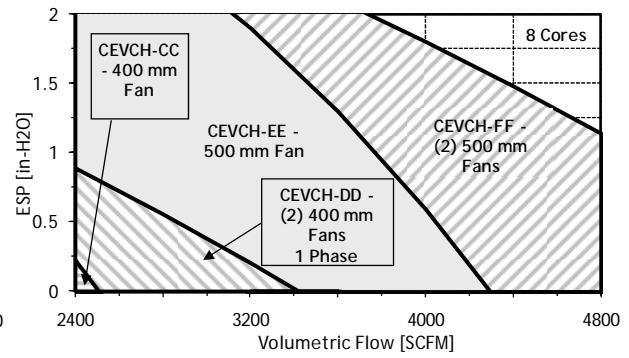


C Series Fan Systems

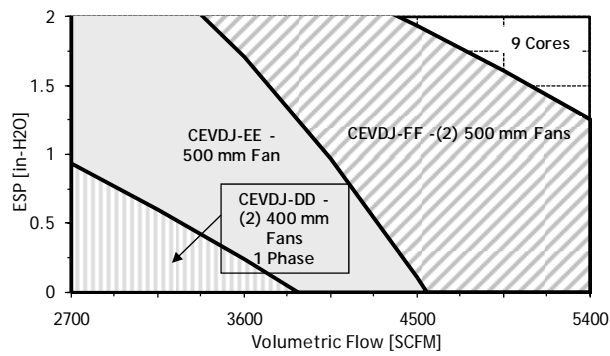
CEVCG-xx System



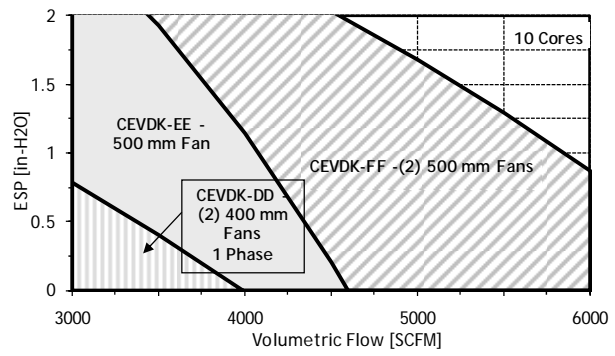
CEVCH-xx System



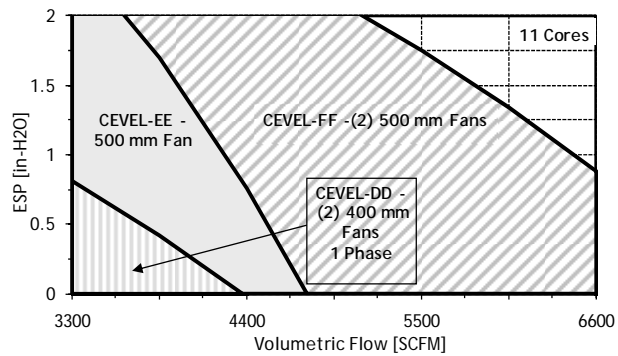
CEVDJ-xx System



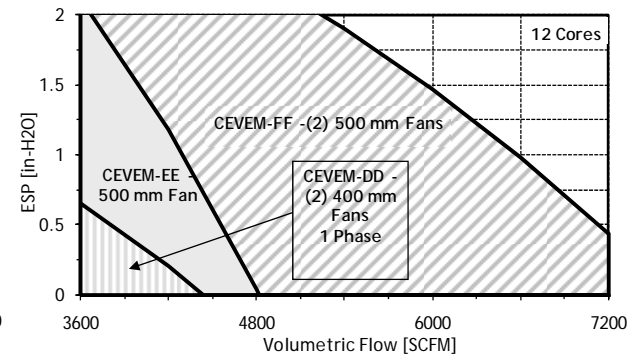
CEVDK-xx System



CEVEL-xx System

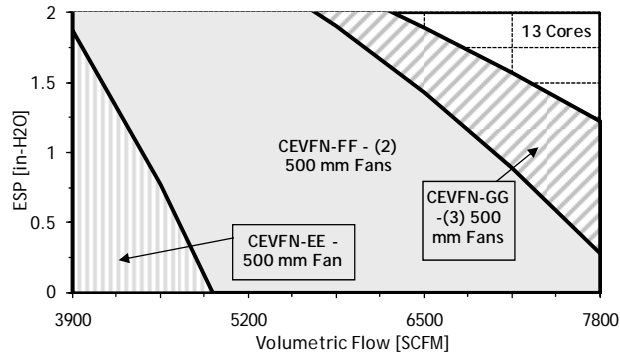


CEVEM-xx System

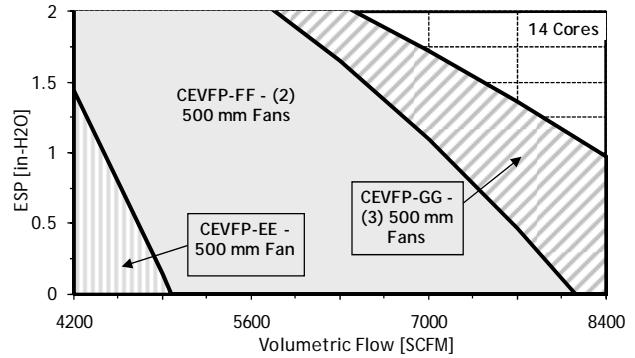


C Series Fan Systems

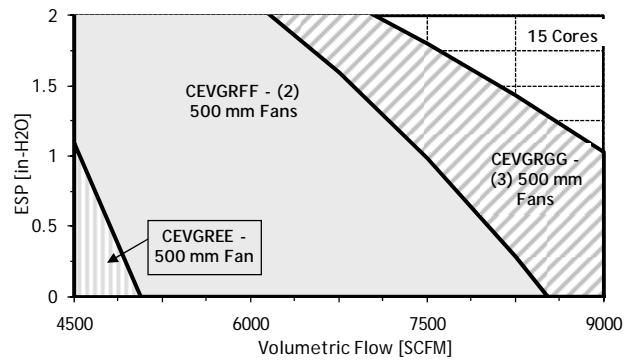
CEVFN-xx System



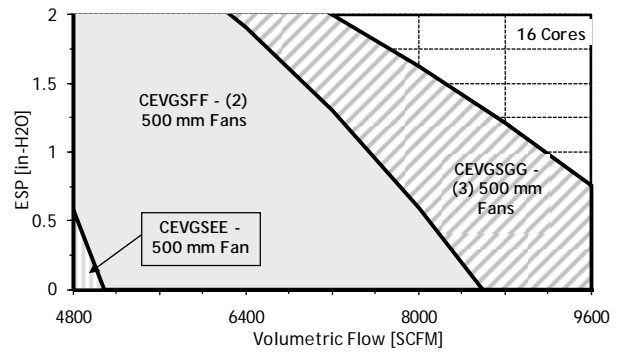
CEVFP-xx System



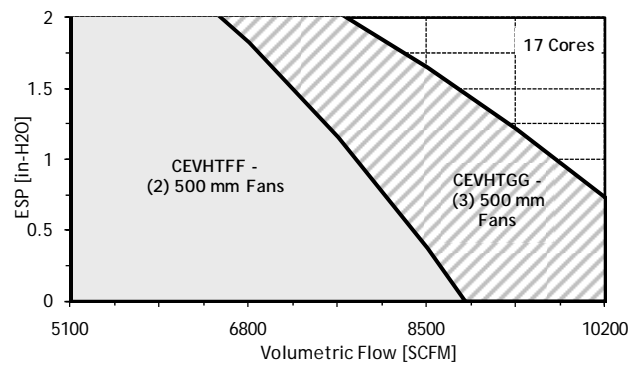
CEVGR-xx System



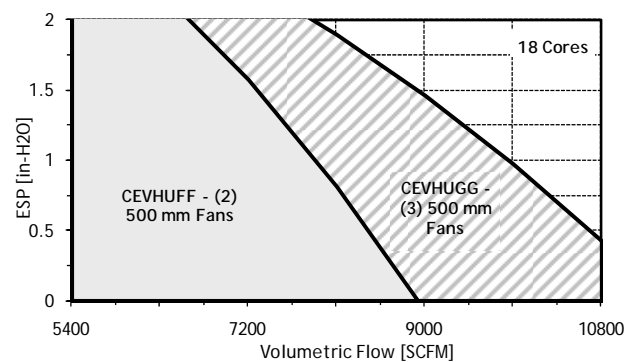
CEVGS-xx System

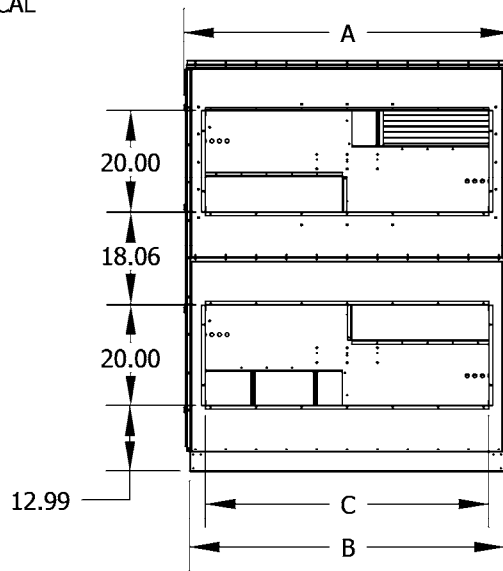
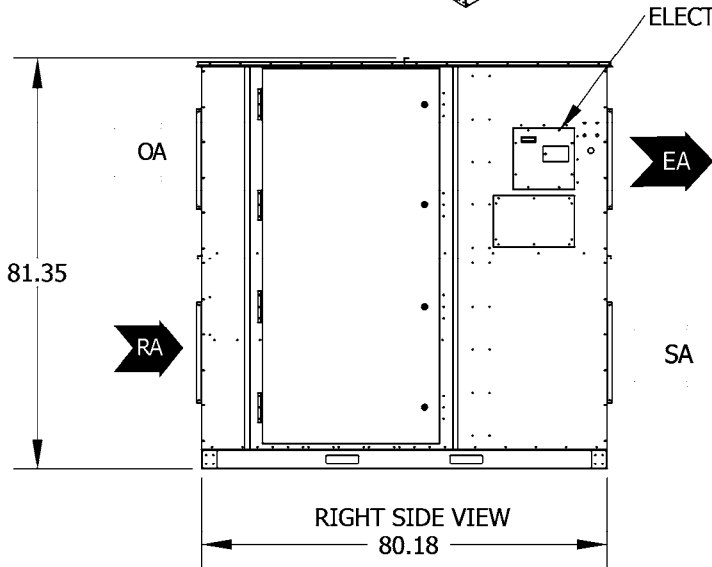
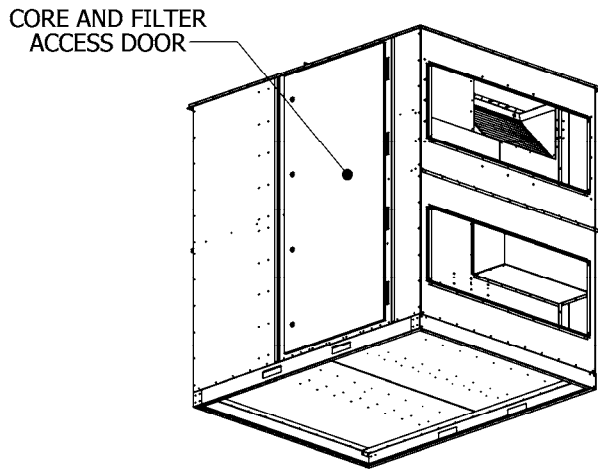
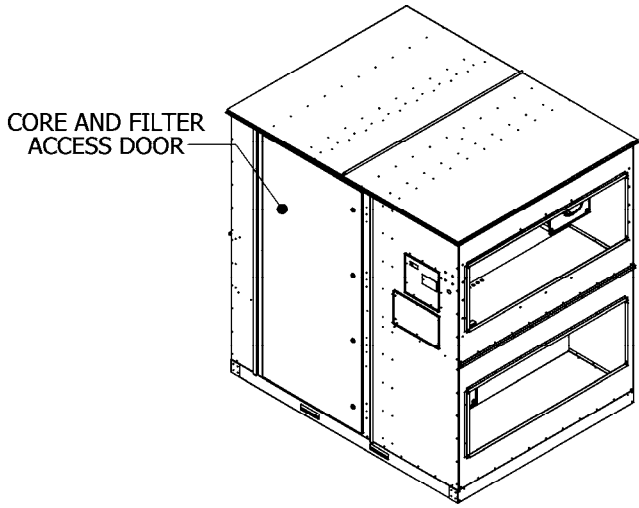


CEVHT-xx System

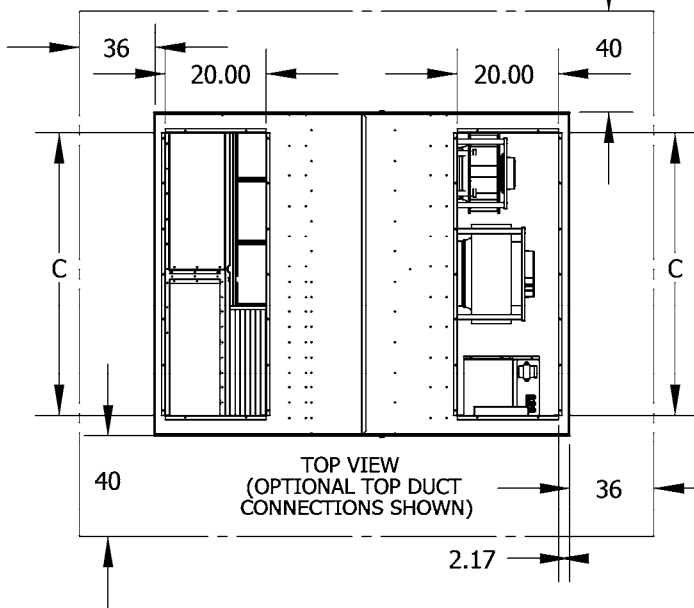


CEVHU-xx System





RECOMMENDED SERVICE AREA SHOWN



NOTES:

SYSTEM IS INTENDED FOR INDOOR USE ONLY

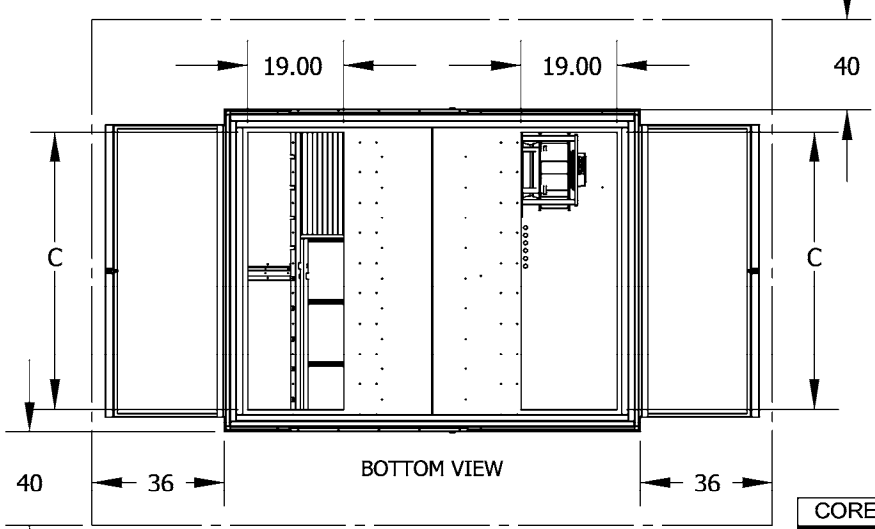
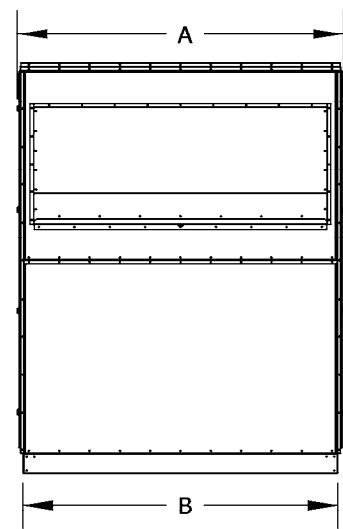
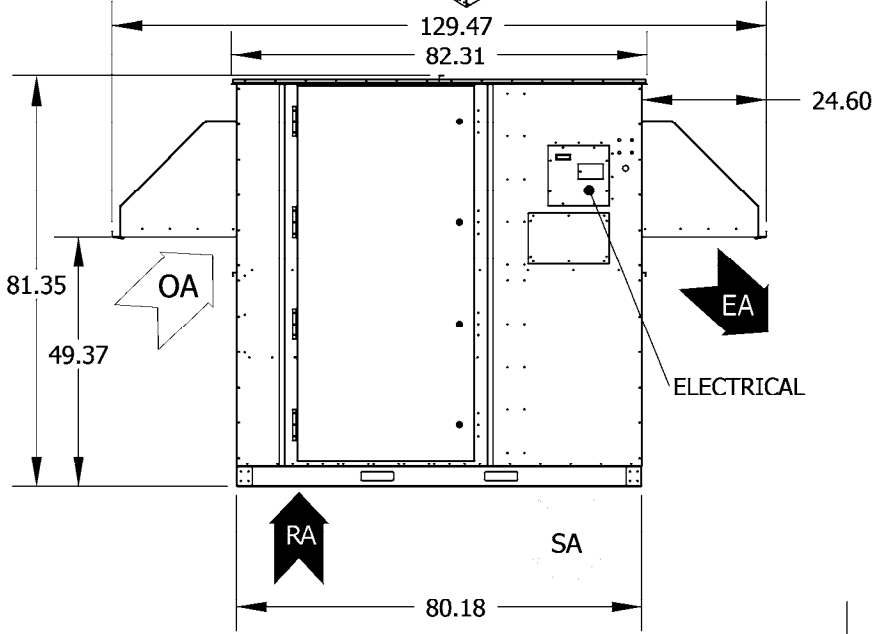
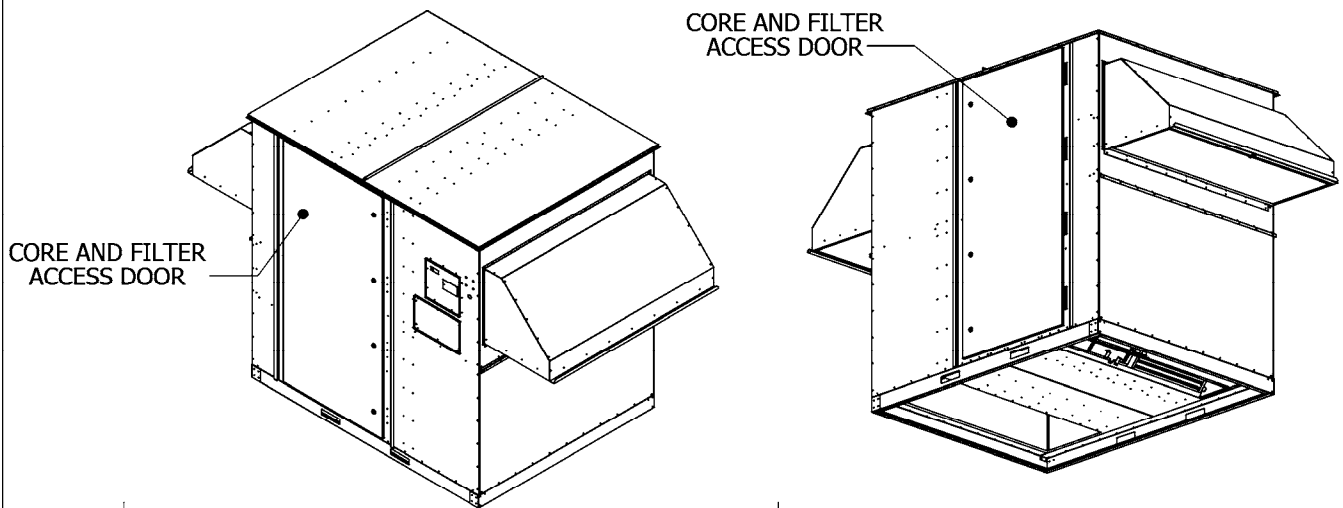
- OA - OUTSIDE AIR INTAKE
- SA - SUPPLY AIR EXIT
- RA - RETURN AIR INTAKE
- EA - EXHAUST AIR EXIT

OA & RA INPUTS CAN BE SWITCHED UPON REQUEST, CAUSING SA & EA TO REVERSE POSITIONS

FILTER SIZE:
20" X 25" X 2"
2 FILTERS PER CORE

CEVD MODEL PICTURED

CORES	MODEL #	WEIGHT [LB]	A	B	C
3 - 4	CEVA	880	27.45	25.15	18.88
5 - 6	CEVB	1190	39.82	37.52	31.25
7 - 8	CEVC	1580	52.20	49.90	43.63
9 - 10	CEVD	1790	64.57	62.27	56.00
11 - 12	CEVE	2000	76.95	74.65	68.38
13 - 14	CEVF	2390	89.32	87.02	80.75
15 - 16	CEVG	2590	101.70	99.40	93.13
17 - 18	CEVH	3000	114.07	111.77	105.50



NOTES:
 SYSTEM IS INTENDED FOR INDOOR USE ONLY
 OA - OUTSIDE AIR INTAKE
 SA - SUPPLY AIR EXIT
 RA - RETURN AIR INTAKE
 EA - EXHAUST AIR EXIT

OA & RA INPUTS CAN BE SWITCHED UPON REQUEST,
 CAUSING SA & EA TO REVERSE POSITIONS

FILTER SIZE:
 20" X 25" X 2"
 2 FILTERS PER CORE

CEVD MODEL PICTURED

CORES	MODEL #	WEIGHT [LB]	A	B	C
3 - 4	CEVA	940	27.45	25.15	17.88
5 - 6	CEVB	1270	39.82	37.52	30.25
7 - 8	CEVC	1670	52.20	49.90	42.63
9 - 10	CEVD	1900	64.57	62.27	55.00
11 - 12	CEVE	2120	76.95	74.65	67.38
13 - 14	CEVF	2520	89.32	87.02	79.75
15 - 16	CEVG	2750	101.70	99.40	92.13
17 - 18	CEVH	2970	114.07	111.77	104.50

RECOMMENDED SERVICE AREA SHOWN

Contact Information

For sales & application information, please contact us at:

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or

727-375-8484 x211

For installation & warranty information, please contact us at:

Tech@ConsERV.com

or

727-375-8484 x230

Please visit us at

www.ConsERV.com

to find out more about ConsERV™ technology
and to locate your local
ConsERV™ Manufacturer's Representative

ConsERV™ products provide...

- High latent heat transfer = high performance
- Improved indoor humidity and moisture control
- Peak demand and overall energy savings
- Excellent part load performance
- No rotating parts in the component - low maintenance
- No drain pans to worry about
- Safe downsizing of HVAC plants