

UVC-Aire



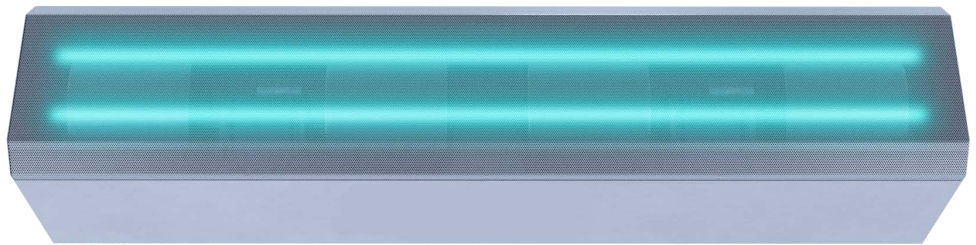
UV-C light system for air purification

The UVC-Aire offers a variable speed air curtain in a stainless-steel case. ¾ HP motors run continuously on low speed to provide a constant stream of purified air. Low-speed operation of the unit has been proven to inactivate/kill up to 99% of Coronavirus pathogens passing through the air curtain. The UVC-Aire is ideal for healthcare, retail, gyms, restaurants and other facilities looking to provide an added layer of protection against airborne germs.

OPTIONS

HEATING

Electric.UVC-E



AT A GLANCE

UVC Light Wavelength
253.7nm

COVID-19 Kill Rate
99.01 to 99.71%
dependent on unit/speed

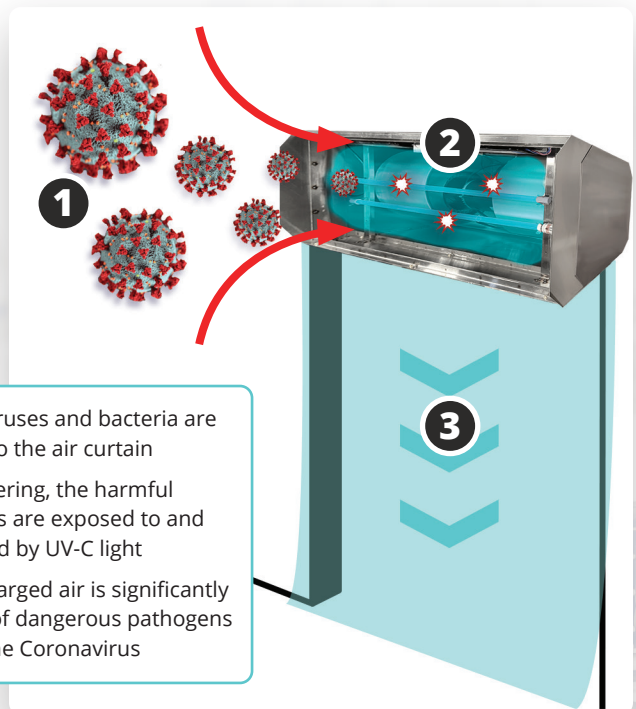
For Door Widths Between
36" and 168"

KEY DESIGN FEATURES

- Unit runs continuously in sterilization mode (low speed), even when the door is closed, to provide constant air purification.
- Unit will ramp up to potentiometer-set speed when the door opens.
- Adjustable speed, ¾ HP ECO Motors offer up to 72% energy savings over PSC motors.
- Fully-assembled and available in full-foot increments from 36" up to 168" (emitters installed in the field).
- Includes unit-mounted cleanable filter and disconnect switch for safe and secure maintenance and emitter replacement.
- Environmental separation, temperature control, pest control and air purification.

STANDARD CONTROLS

- Variable speed dial
- Thermostat, if electrically heated (Model UVC-Aire-E)
- Magnetic Door Switch for activation
- Time Delay Relay



1. Germs, viruses and bacteria are pulled into the air curtain
2. Upon entering, the harmful pathogens are exposed to and inactivated by UV-C light
3. The discharged air is significantly reduced of dangerous pathogens such as the Coronavirus

► UVC & UVC-E | PERFORMANCE

UVC | Performance Table

MODEL	Nozzle Width (in.)	Max FPM at Nozzle	Average Outlet Velocity (FPM)	Airflow Rate (CFM)	Outlet Velocity Uniformity	Power Rating (kW)	Number of Motors	Motor HP	Weight (lbs)	Electric Heat		Coronavirus Inactivation Rate (low speed)	Number of Emitters
										Heater kW	Temp Rise (°F)		
UVC-1-36 (E)	36	5654	2060	1401	88%	0.76	1	3/4	110	10	13	99.01	2
UVC-1-42 (E)	42	5321	2022	1678	88%	0.84	1	3/4	118	10	13	99.15	2
UVC-1-48 (E)	48	5296	1849	1757	84%	0.86	1	3/4	125	10	13	99.56	2
UVC-1-60 (E)	60	5288	1619	2007	72%	0.94	1	3/4	139	10	13	99.71	2
UVC-2-72 (E)	72	5654	2060	2802	88%	1.52	2	3/4	193	20	13	99.44	2
UVC-2-84 (E)	84	5321	2022	3356	88%	1.68	2	3/4	212	20	13	99.26	4
UVC-2-96 (E)	96	5296	1849	3514	84%	1.72	2	3/4	231	20	13	99.62	4
UVC-3-108 (E)	108	5654	2060	4203	88%	2.28	3	3/4	275	30	13	99.63	4
UVC-3-120 (E)	118	5340	2033	4757	88%	2.44	3	3/4	306	30	13	99.61	4
UVC-3-132 (E)	133	5305	1860	4809	72%	2.46	3	3/4	336	30	13	99.61	4
UVC-4-144 (E)	145	5654	2060	5604	88%	3.04	4	3/4	388	40	13	99.48	4

! For a unit over 12 feet long, or a non-standard electric heater kW, consult factory.

UVC & UVC-E | Sound Levels

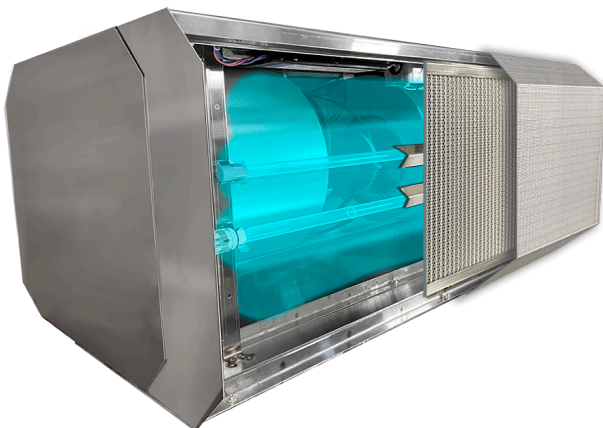
High Speed	63 dBA	Low Speed	56 dBA	Measured 10 ft. from unit in a free field based on a 1 motor unit
-------------------	--------	------------------	--------	---

UVC & UVC-E | Single Phase Motor Options

Voltages available	120	208 - 240	277	480	575
Amp draw per motor	9.6	5.8	5.0	Neutral wire will need to be run to use the 277V motor. If not, a transformer will be required.	A transformer will be required.

UVC & UVC-E | Emitter Amp Draws

Voltages available	120	208 - 240	277	480	575
Amp draw per motor	1.2	0.7	0.5	Neutral wire will need to be run to use the 277V motor. If not, a transformer will be required.	A transformer will be required.



Performance Highlights

UVC-Aire – Proven to eliminate coronavirus and other viruses from the air.

- Up to 99 percent effectiveness against coronavirus.
- Also available as extension to retrofit previously installed air curtains.
- Continuous air sterilization along with traditional air curtain benefits including environmental separation and temperature control.

► UVC-E | ELECTRICAL

UVC-E | AMP Draw, Circuits & Breaker Size Table

- * With optional branch fusing for Single Point Power (SPP)
- ^ SPP by default
- ‡ High amp draws may be prohibitive. Reduced and custom kW available. Contact Factory.
- + With internally mounted transformer
- ++ With motor transformer mounted in remote control panel

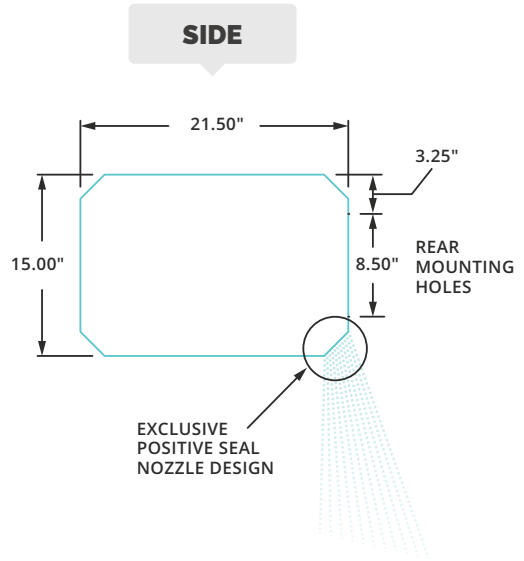
AMP DRAW (Breaker Size)

MODEL	208 / 1 / 60			240 / 1 / 60			277 / 1 / 60	208 / 3 / 60				240 / 3 / 60				480 / 3 / 60 with Neutral			480 / 3 / 60 with Motor Transformer			575 / 3 / 60 with Motor Transformer		
	Separate Supply Circuits			Separate Supply Circuits			Circuit 1	Separate Supply Circuits				Separate Supply Circuits				Separate Supply Circuits			Separate Supply Circuits			Separate Supply Circuits		
	1	2	SPP*	1	2	SPP*		1	2	3	SPP*	1	2	3	SPP*	1	2	SPP*	1	2	SPP*	1	2	SPP*
UVC-1-36E																			15.2 (20) ++			12.6 (20) ++		
UVC-1-42E	31.2 (40)	24.0 (35)	55.3 (70)	28.0 (40)	20.8 (30)	48.9 (70)	42.1 (60)	35.0 (45)	-	-	^	31.3 (40)	-	-	^	18.0 (25)	-	^	-	-	^	-	-	^
UVC-1-48E																			15.2 (20) +			12.6 (20) +		
UVC-1-60E																								
UVC-2-60E	‡	-	‡	‡	-	‡	‡	41.6 (60)	13.0 (20)	-	54.6 (70)	36.1 (50)	13.0 (20)	-	49.1 (70)	29.0 (40)	-	^	n/a	-	-	n/a	-	-
UVC-2-72E	‡	-	‡	‡	-	‡	‡	40.8 (60)	27.8 (35)	-	68.5 (90)	37.1 (50)	24.1 (35)	-	61.1 (80)	35.1 (45)	-	^	30.3 (40) ++	-	^	25.3 (35) ++	-	^
UVC-2-84E	‡	-	‡	‡	-	‡	‡	42.2 (60)	27.8 (35)	-	69.9 (90)	38.5 (50)	24.1 (35)	-	62.5 (80)	36.1 (50)	-	^	30.3 (40) +	-	^	25.3 (35) +	-	^
UVC-2-96E																								
UVC-3-108E																			46.5 (60) ++			38.8 (50) ++		
UVC-3-120E	‡	-	‡	‡	-	‡	‡	48.0 (60)	27.8 (35)	27.8 (35)	‡	44.3 (60)	24.1 (35)	24.1 (35)	‡	35.0 (45)	18.0 (25)	53.1 (70)	-	^	-	-	^	
UVC-3-132E																			46.5 (60) +			38.8 (50) +		
UVC-4-144E	‡	-	‡	‡	-	‡	‡	‡	-	-	‡	‡	-	-	‡	46.1 (60)	24.1 (35)	70.1 (90)	36.6 (50) ++	24.1 (35) ++	60.6 (80) ++	30.5 (40) ++	20.1 (30) ++	50.6 (70) ++

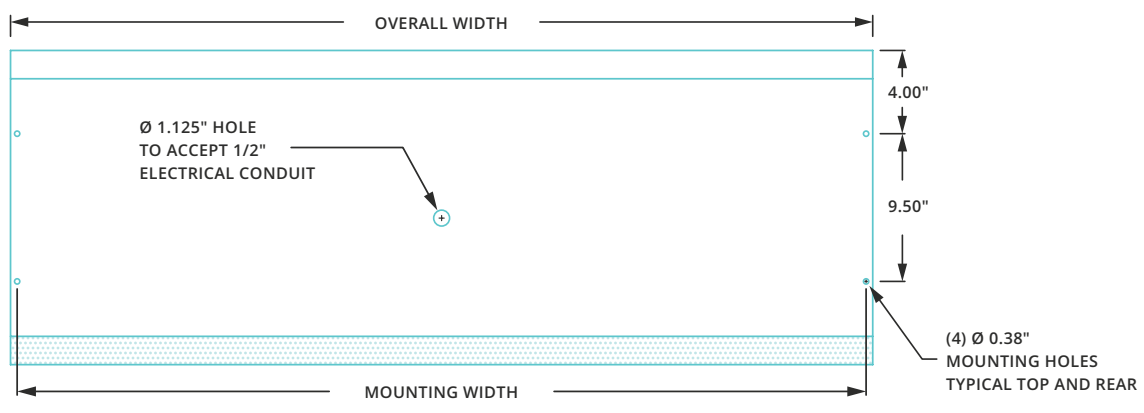
► UVC & UVC-E | MECHANICAL DETAILS & DRAWINGS

UVC & UVC-E | Mechanical Information Table

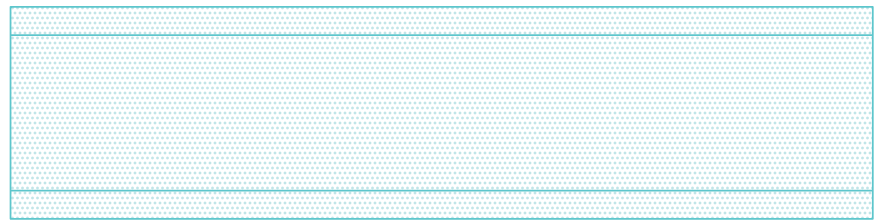
MODEL	Nozzle Width (in.)	Overall Width (in.)	Mounting Width (in.)
UVC-1-36 (E)	36	37	36.06
UVC-1-42 (E)	42	43	42.06
UVC-1-48 (E)	48	49	48.06
UVC-1-60 (E)	60	61	60.06
UVC-2-60 (E)	60	61	60.06
UVC-2-72 (E)	72	73	72.06
UVC-2-84 (E)	84	85	84.06
UVC-2-96 (E)	96	97	96.06
UVC-3-108 (E)	108	109	108.06
UVC-3-120 (E)	118	119	118.06
UVC-3-132 (E)	133	134	133.06
UVC-4-144 (E)	145	146	145.06



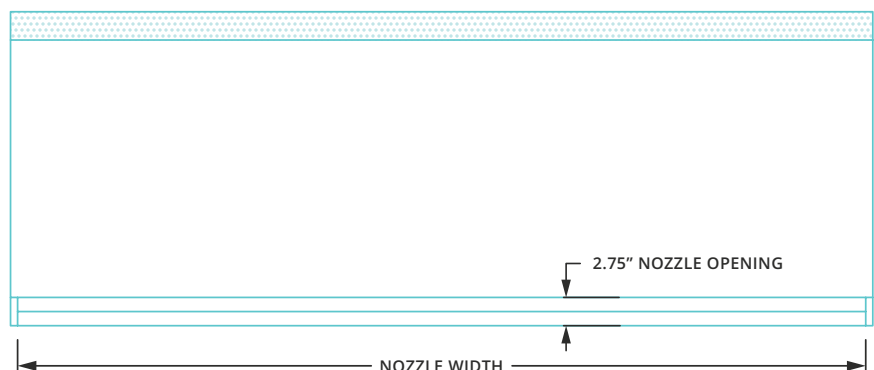
TOP



FRONT



BOTTOM



► UVC & UVC-E | INSTALLATION

NOTE: The air curtain should be mounted as close to the door header/opening as possible for maximum performance. For every one inch the bottom of the air curtain is mounted above the door header, the back side of the air curtain should be moved away from the wall 1/2 inch.

A WALL MOUNT

Back side of air curtain has 4 mounting holes capable of accepting four 3/8 mounting bolts or lags, with washers (use these holes only for mounting). Mark and pre-drill mounting surface accurately. A long extension and ratchet will negate the need to remove the motor-blower plate when installing.

Mounting bolts or lags of sufficient size and strength should be installed and tightened through the four 7/8 inch holes in motor/blower plate.

If motor/blower plate has to be removed, the junction box inside the unit must be removed along with any electrical switches that may be in the way.

The electrical switches have a lever that slides in one direction to release the switch contacts from the switch body. All wires will then stay intact for easy installation when replacing the blower plate.

Remove 7/16 whizlock nuts holding plate in place, and slide plate out, rotating top portion of plate so it comes out first. Remember when installing plate to put bottom of plate in first and rotate top in last.

B WALL MOUNT EXTENSION PLATES

Extension plates bolt onto the back of the unit, utilizing the 4 original mounting holes. Brackets have elongated mounting slots that extend the mounting width by 2-1/2 to 3-1/2 inches.

C BRACKETS

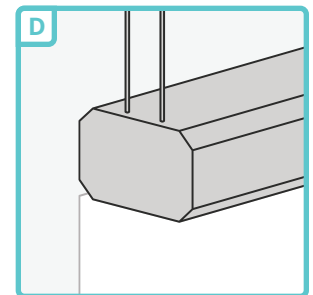
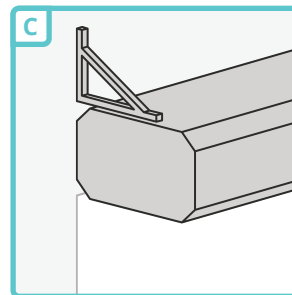
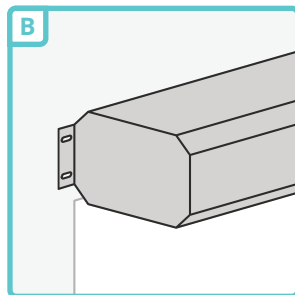
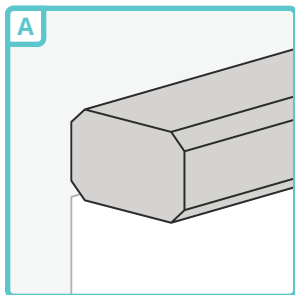
Mounting brackets (also called knee, angle or L-brackets) can be flush to the wall or constructed to account for a projection from the wall. For proper size brackets measure standoff distance from wall to back of where air curtain will be.

D TOP MOUNT

Unit has four 3/8-16 threaded inserts for installing one end of threaded rods. The other ends of the threaded rods can be attached to the ceiling. Threaded rod should not extend more than 3/4 inch into air curtain.

! IMPORTANT INSTALLATION STEPS FOR UVC-AIRE

1. UNIT SHOULD BE POWERED OFF BEFORE EMITTERS ARE INSTALLED. AVOID ANY DIRECT EXPOSURE TO EMITTERS.
2. Emitters are shipped separately to reduce chance of damage. They should be opened and installed last. Gloves must always be worn when handling emitters.
3. Triangular "shields" are installed over emitters. These shields must be removed and reinstalled after emitters have been plugged into socket.
4. The emitters and sockets have arrows that will align when connecting.
5. Before powering unit, be sure that emitters, shields, filter and screen are installed.
6. Visually inspect unit for any gaps where light may escape from unit. Apply supplied silicone to cover gaps. This should also be done after unit is powered. Any visible gaps will require unit to be powered off, reopened and have gaps sealed.
7. Do not stand within 12" of unit while in use.



MB123 QUICK MOUNTING PLATE

Optional Installation (See page 224 for more detail)

Step 1

Attach top mounting bracket to back of air curtain using the upper mounting holes on back of unit.

Step 2

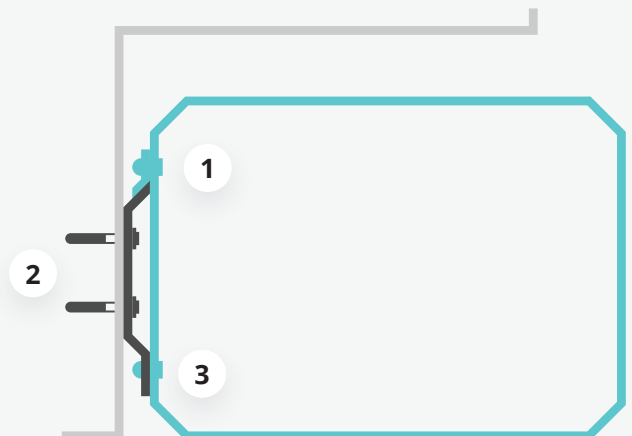
Attach the mounting bracket to the wall. Make sure there is sufficient room between mounting plate and ceiling to mount air curtain.

Step 3

Place air curtain over mounting bracket. The top and bottom brackets will lock into place supporting the weight of the air curtain. Attach the bottom bracket to the air curtain using the lower mounting holes.



When mounted, bottom of air curtain is to be flush with bottom of the door header.



Application Spotlight

Air Purification

2.1.1



UVC-Aire | Top Mount (Threaded Rod)

UV-C Light Air Purification

- UV-C light kills up to 99 percent of all airborne coronavirus pathogens as they pass through the air curtain. . (rates vary by unit's size and speed setting).
- Releases no harmful ozone back into the air.
- UV-C lights inactivate bacteria and viruses without need for HEPA-based filtration, which only traps germs, without inactivating them.
- Ideal for healthcare, retail stores, restaurants, gyms and other facilities requiring a safe and effective method of separating environments, blocking insects, controlling climates and killing germs.
- Powered Aire's UVC-Aire uses the strongest output UVC emitters on the market to achieve the highest airborne inactivation rates possible.
- Available in stand-alone unit or as retrofit extension to fit previously installed air curtains.