

# VORTEX HVP

HEPA FILTRATION AIR CLEANING DEVICE



## PRODUCT DESCRIPTION

AIRBOX Vortex HVP is a high-capacity, multi-use, industrial-grade air cleaning system which uses a 4-Stage Filtration System, including Chem Shield Advanced Molecular Adsorbent v-bank filter for heavier concentrations of unwanted gases, to provide Equivalent Clean Airflow ( $V_{ACS}$ ) for outdoor and indoor install types. The Vortex utilizes a multi-stage filtration configuration designed to target and reduce high levels of airborne particulates/aerosols and molecular contaminants such as VOCs (volatile organic compounds), in commercial and industrial environments. The AIRBOX Vortex HVP is equipped with the Smart Fleet Management® platform, which allows AIRBOX units to run on differing schedules and keeps track of actual filter life and other maintenance needs, and a direct drive ECM Fan for maximized efficiency. In addition, the VORTEX HVP qualifies the space for ASHRAE Standard 62.1 IAQP (Indoor Air Quality Procedure) through the use of air cleaning with recirculation, which could allow for a reduction in the amount of outdoor air required and HVAC energy if all specified Design Compounds (DCs) are maintained below their design limits specified in ASHRAE Standard 62.1.

## COMPLIANCE AND PERFORMANCE SPECIFICATIONS

ASHRAE 241-2023	Compliant*
UL Listed	Listing in Progress
IEST-RP-CC007	Certified 99.99% @ 0.3 microns HEPA Filter
US DOE-STD-3020-2015	
UL900	
Bioaerosol Testing	Available upon Request
Efficacy Testing	Available upon Request

\*Compliance Testing and Certification in progress



Vortex HVP

## TECHNICAL SPECIFICATIONS

Unit Size	65.5"H x 52"W x 107"L
Weight	1,500 lbs
Maximum Nominal Air Flow Rate	9,200 CFM (~550,000 CFH)
Controls	Standard manual control and Smart Fleet Management System (IOT) allowing for remote adjustment.
Enclosure Material and Finish	Aircraft Grade Aluminum Alloy Outside Skin with Structural Steel Frame
	Powder Coat Finish
Additional Features	Differential Pressure and TVOC sensors for concentration and filter life monitoring.
Warranty	Transferable Limited Lifetime Warranty. Lifetime Warranty on material and workmanship. 5 Year warranty on fan and motor package inclusive of electrical.

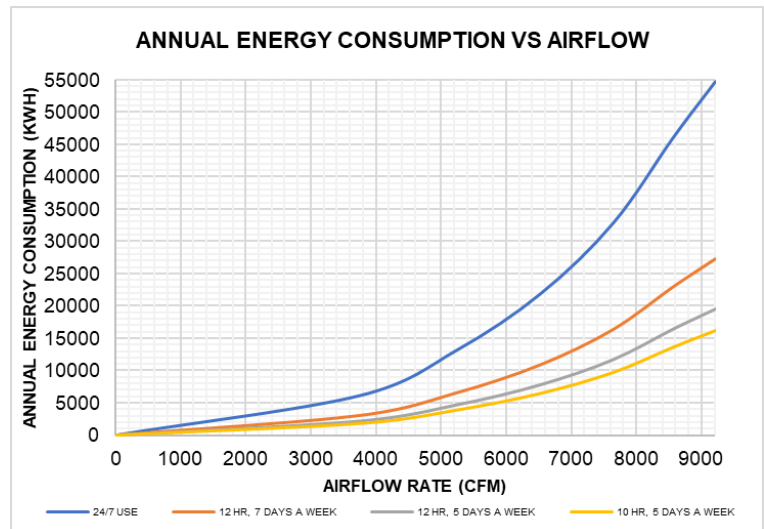
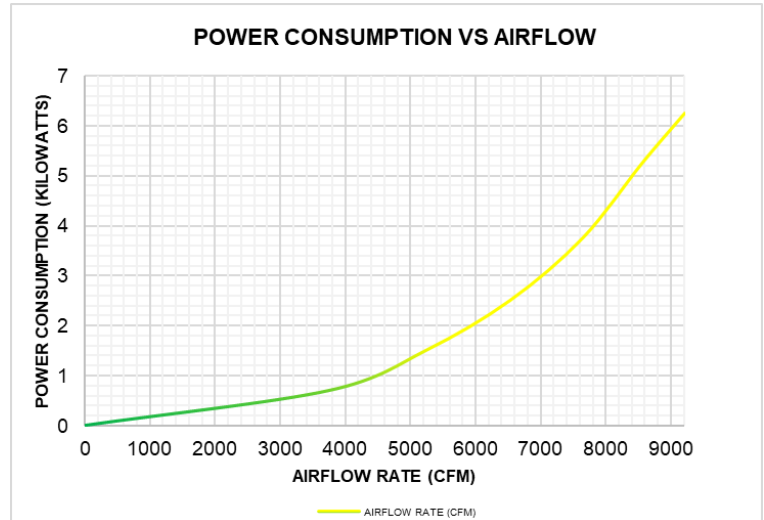
## ELECTRICAL SPECIFICATIONS

Operating Voltage	3~ 200-240 VAC
ECM Fan	3~ 200-240 VAC, 50/60HZ, Ball Bearing, IP55 UL Listed
Connectors	Deutsch DT, IP68 Rated

## FILTRATION SPECIFICATIONS

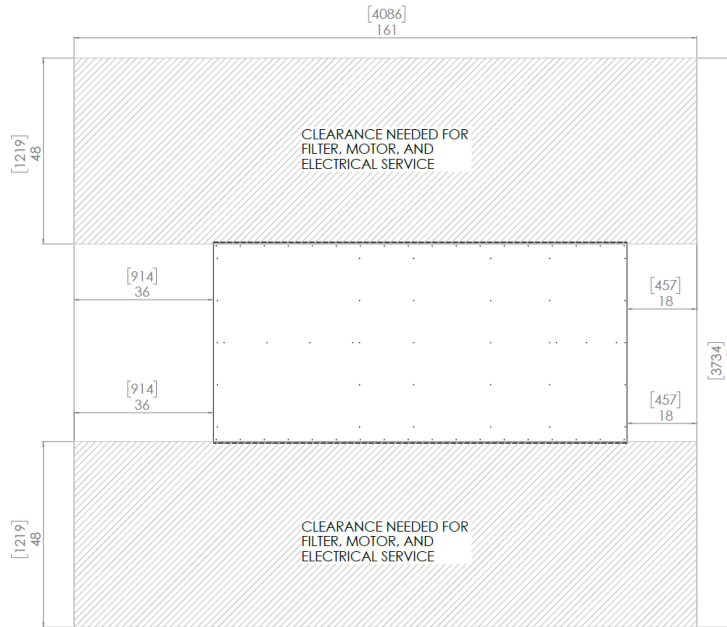
First Stage	<b>Antimicrobial Filter</b>
	MERV 9 4" Radial Pleated Polyester Filters treated with Microban Aegis Microbe Shield®
Second Stage	<b>ChemShield Molecular Adsorbent Media Filter</b>
	Dual 24x24x12" V-Bank Filter with Proprietary Blend of Adsorbent Media
Third Stage	<b>Antimicrobial Filter</b>
	MERV 9 4" Radial Pleated Polyester Treated with Microban Aegis Microbe Shield®
Fourth Stage	<b>HEPA Filter</b>
	Certified 99.99% Effective 12" V-Bank Pleated Glass Media Treated with Microban Aegis Microbe Shield®

**AIRBOX is regulated by the US Environmental Protection Agency and state governments as a pesticidal device. Accordingly, our air cleaners are packaged and labeled in accordance with EPA regulations under FIFRA section 2(q)(1) and 40 CFR Part 156.**  
**EPA Registered Establishment No.: 97081-NC-1**



# VORTEX HVP

HEPA FILTRATION AIR CLEANING DEVICE



**MINIMUM INSTALLATION CLEARANCES FOR VORTEX HVP UNIT SERVICE**

## Vortex 9000

### Molecular Adsorbent Media Filter

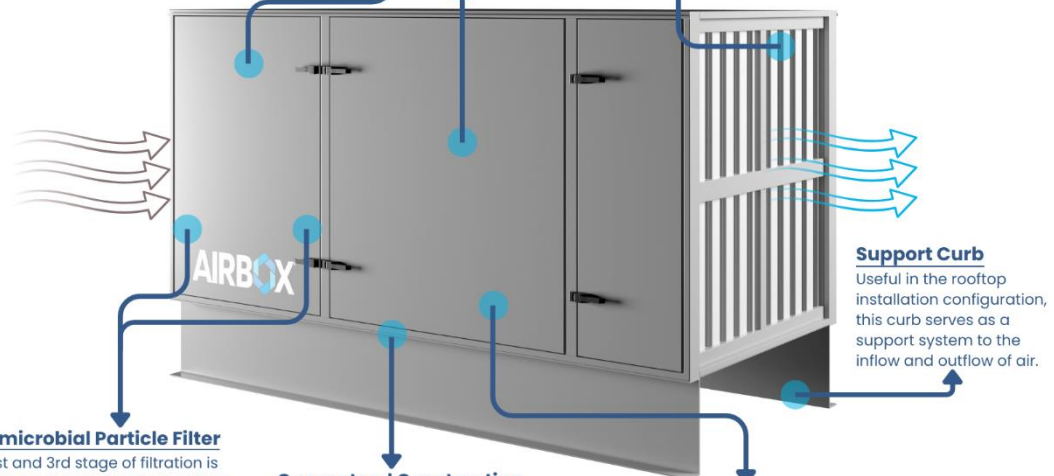
The 2nd stage of filtration is configured and customized with various blends to neutralize application specific concentrations of unwanted gases and chemical contaminants, such as VOCs and ozone. Efficacy tested in accordance with ISO 10121 and ASHRAE 145.1.

### ECM Fan

UL Listed motor producing 9,200 CFM. Provides up to 18 years of fan life when ran 12 hours per day.

### High Flow V-Bank HEPA Filter

The final filtration stage is Certified 99.99% effective in removing airborne particles and aerosols at most penetrating particle size (MPPS) OF 0.3 Micron. IEST-RP-CC001, IEST-RP-CC034.5.



### Antimicrobial Particle Filter

The 1st and 3rd stage of filtration is used to extend the life of other filters within the system by removing larger particles from the air using it's proprietary dual-layered blended polyester media treated with an EPA registered antimicrobial agent. This filter has an efficiency value of MERV9-A and an ISO 16890 ePM2.5-55.

### Guaranteed Construction

Manufactured in the USA, this unit was built to last with a transferable lifetime warranty. It was designed with a durable powder coat finish, all aluminum sheet metal skin for leak-free construction and increased weatherability, powder coated Zinc keyed draw latches, high-quality R12 Foam insulation between double wall construction, and seamless maintenance in mind with well-designed slide-out filter racks and cam-lock style compression seals.

### Advanced Management Controls

This unit is equipped with a remotely controlled dashboard that allows you to connect, manage, adjust, schedule, and monitor, allowing you to conserve energy and money. This software connects to the integrated differential pressure, VOC, and CO2 sensors on board to read real-time indoor air quality and track filter life and efficiency.

### Support Curb

Useful in the rooftop installation configuration, this curb serves as a support system to the inflow and outflow of air.

## VORTEX SECTION VIEW