



# Building Performance Equipment, Inc.®

Sustainable, Reliable, Energy Efficient, Ventilation Systems



## BPE-SC-UNI-8000 Commercial Installation Specifications and Guidance

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# Building Performance Equipment, Inc.®

Sustainable, Reliable, Energy Efficient, Ventilation Systems



At Building Performance Equipment Inc., we are committed to designing high-efficiency HVAC systems. With superior energy recovery at the heart of our current product line, we have raised the bar on ERVs that make a satisfying impact on your energy bill, health, and carbon footprint. This document is intended to illustrate the assembly of a commercial 8000 cfm ERV with necessary components and information provided. Please contact us at 201-722-1414 if you have any questions.



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BPE self-contained unitary ventilation systems are tested during the manufacturing process before we carefully package them for shipping.

The control system has the following features:

**Easy To Use —**  
Setting changes can be made easily with the touch of a button.

**Easy To See —**  
Intuitive digital backlit display.

**Customizable —**  
Include individual air quality enhancements to your system with TrueIAQ™, or integrate them all as part of a total air quality system.



**All-In-One —** Manages humidification, dehumidification, ventilation and bathroom fans from a central point in your home.

**Smart Change/Check Reminders —**  
Lets you know when to service or replace filters, UV bulbs and humidifier pads (based on actual run time).

**Advanced Temperature and Humidity Sensing —**  
Simultaneously displays both indoor and outdoor temperature and humidity levels on-screen. Automatically adjusts inside settings based on outdoor conditions.

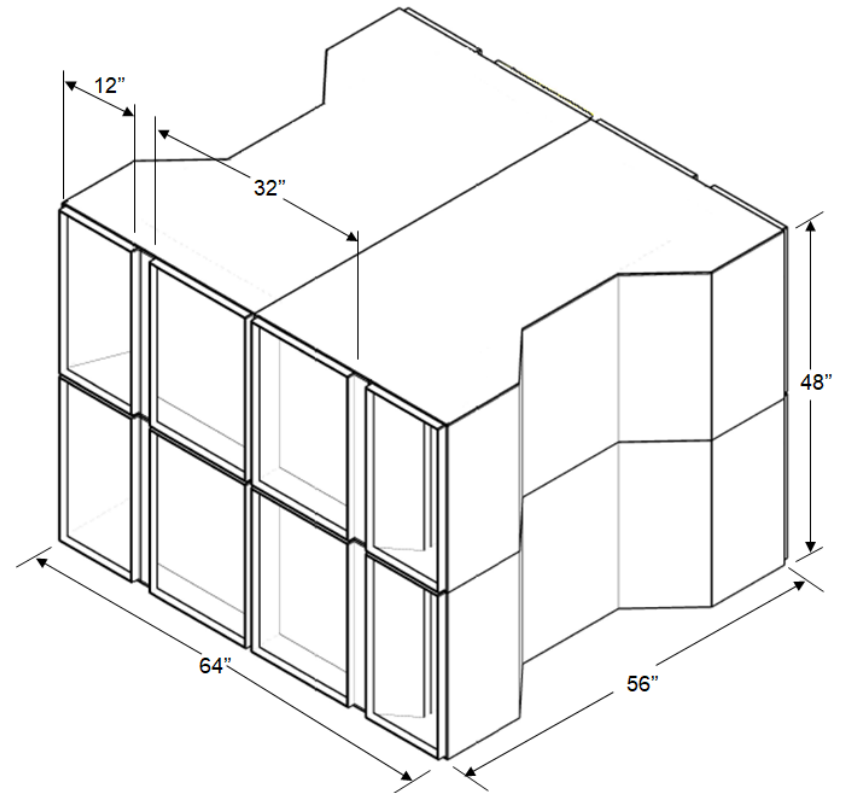


# BPE-SC-UNI-8000

## Specifications

Model Number	BPE-XE-MIR 8000, Energy Recovery Ventilator (ERV)
Ventilation Type	Fixed Plate Polymer, Heat and Humidity Transfer
Typical Air Flow Range	5000-8000 cfm
Thermal Efficiency	71% @ 7500 cfm 82% @ 5000 cfm
Product Weight/ Shipping Weight	808 lbs./900 lbs.
Shipping Dimensions	(4) 56" L x 24" W x 32.5" H
Typical Fan	CANARM 9220-VIB Inline Duct Blower (See page 8)

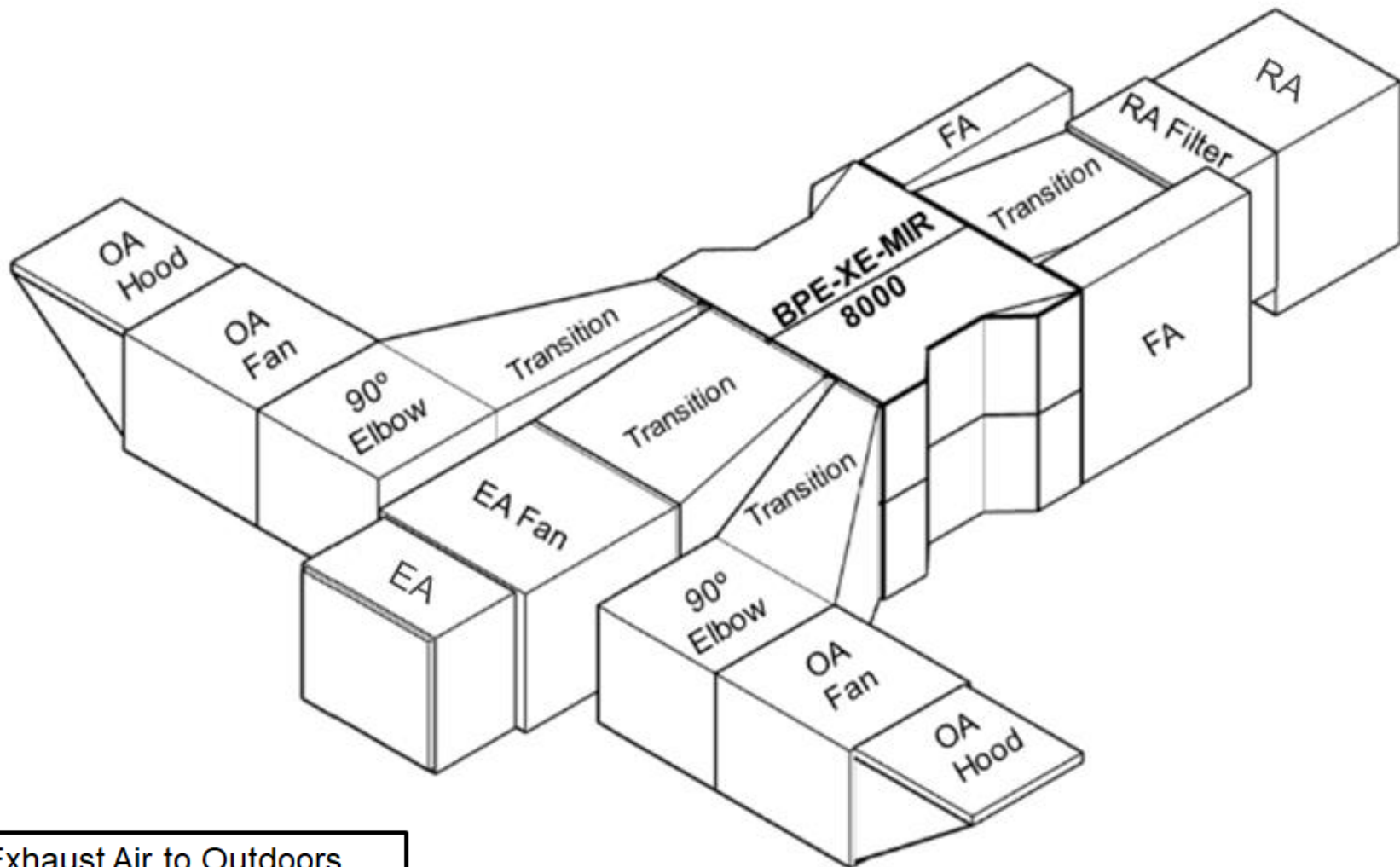
**Note:** Dimensions subject to change without notice





# BPE-SC-UNI-8000

## Layout

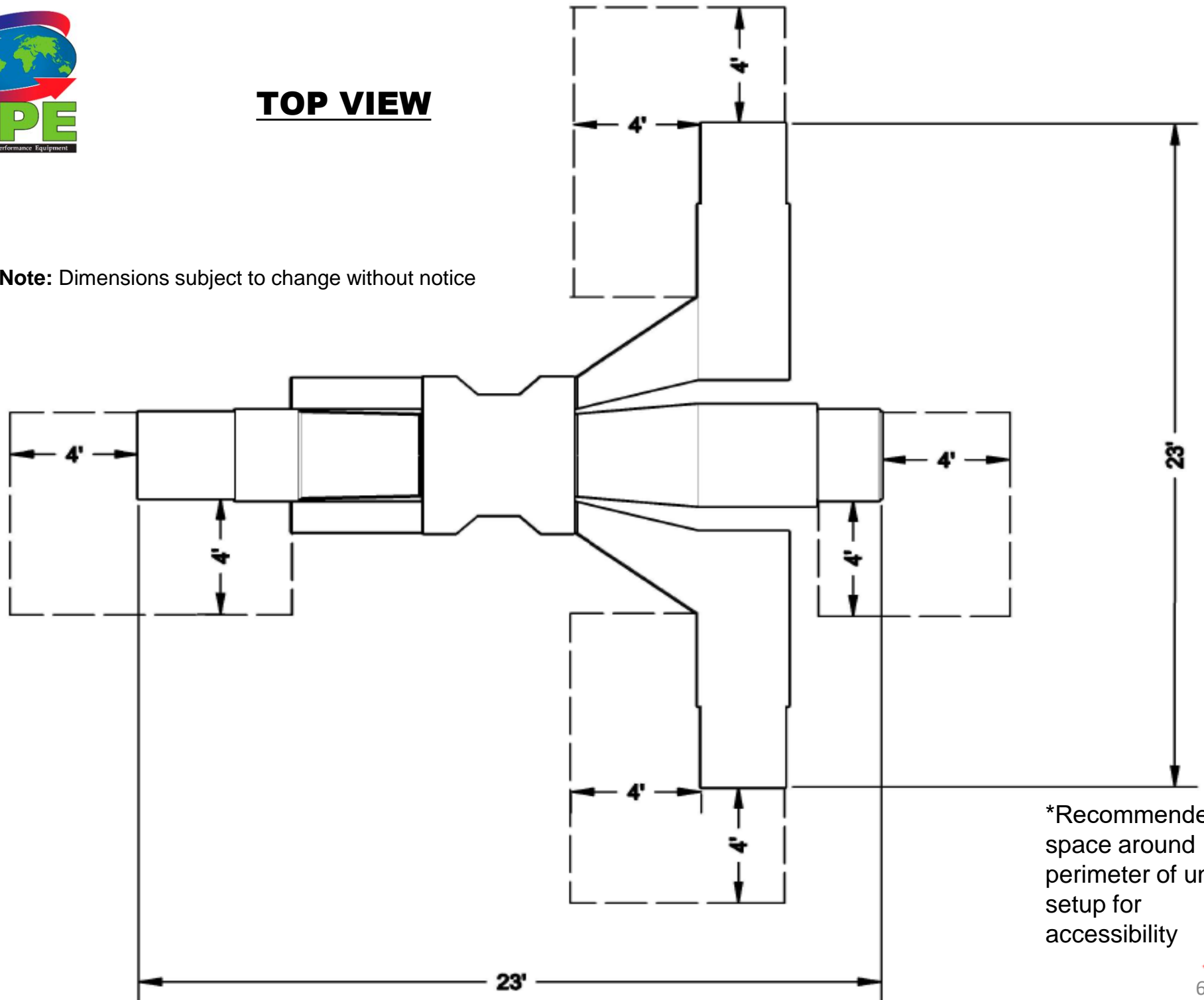


EA: Exhaust Air to Outdoors  
OA: Outdoor Air Intake  
RA: Room Air to be Exhausted  
FA: Fresh Air to Inside



## TOP VIEW

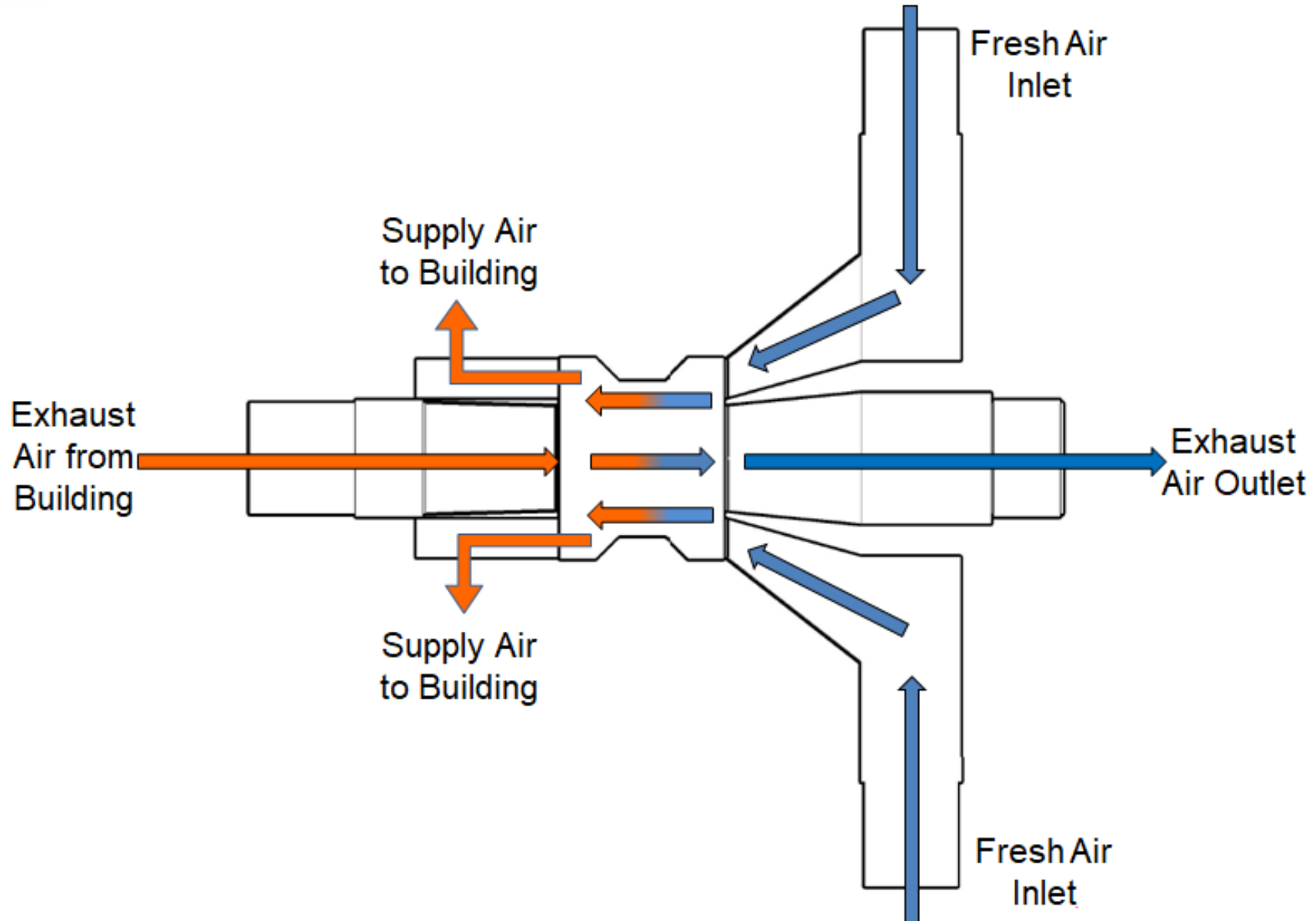
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\*Recommended 4'  
space around  
perimeter of unit  
setup for  
accessibility

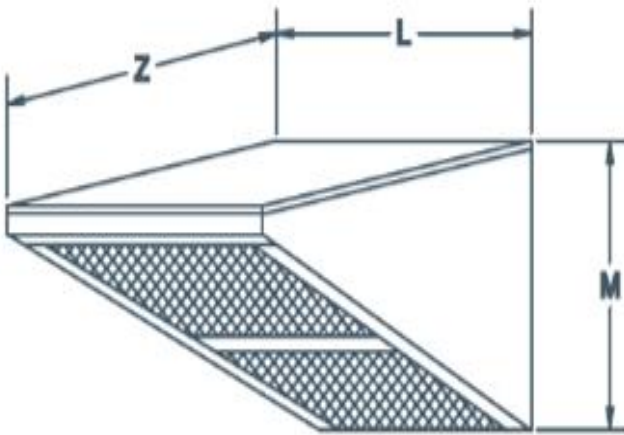


# BPE-XE-UNI-8000 Layout



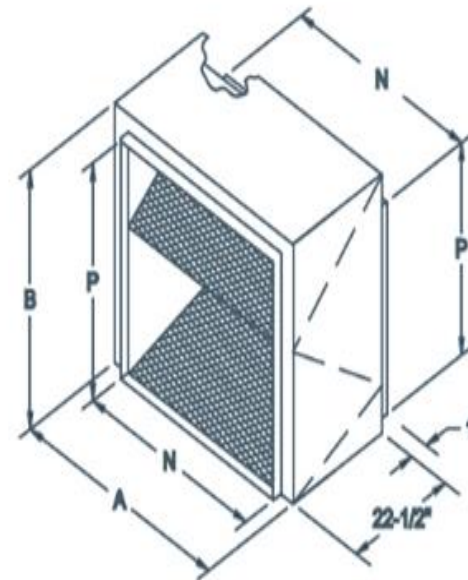
# Intake Hood & Filter Selection

## H9220 Intake



L	38 5/8"
M	35 9/16"
Z	22"

## F9220A Filter Section



A	39 3/4"
B	37 1/4"
N	38 1/2"
P	35 1/4"



# Fan Selection 9220-VIB Inline Duct Blower

## Model Information

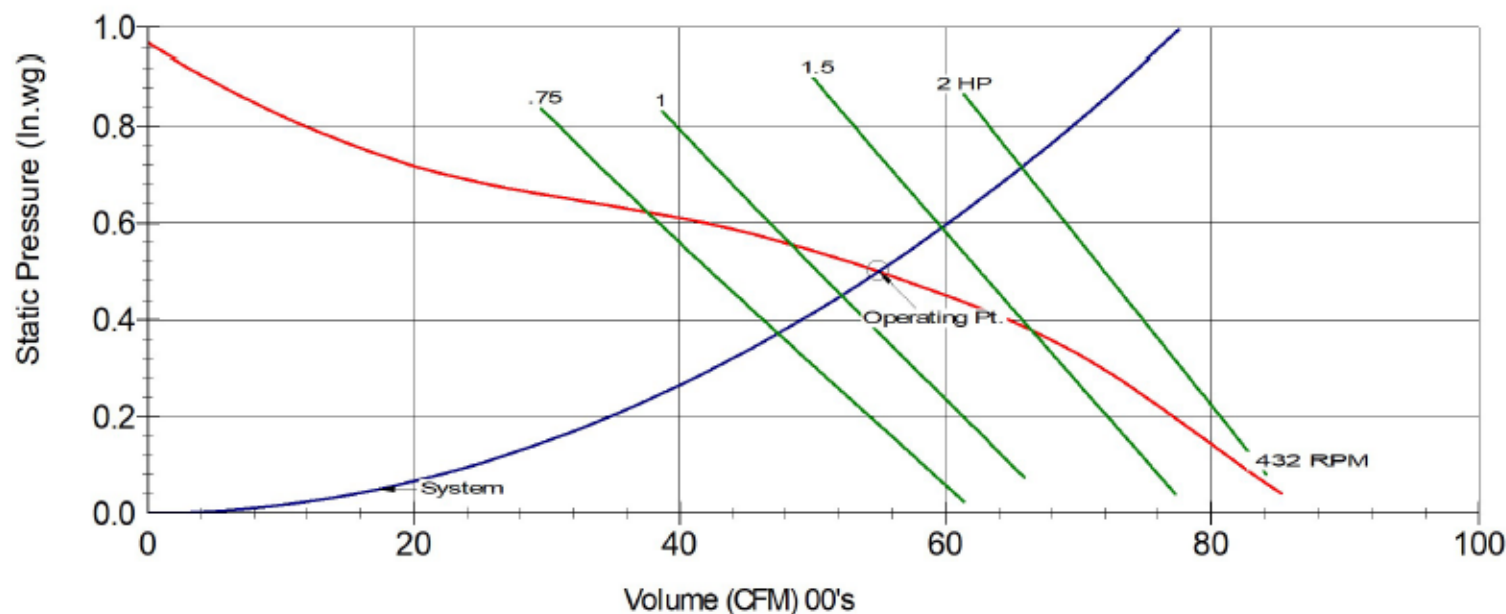
Model: 9220VIB	Part Number: 9020306	
CFM: 5500	Shaft Diameter: 1.4375	Unit Weight: 515
SP: 0.5	Wheel Diameter: 20.4375	Ship Weight: 574
RPM: 432	Tip Speed: 2311 FPM	
BHP: 1.15	Static Efficiency: 38	Elevation: 0
	Outlet Velocity: 1194 FPM	Temperature: 70

## Sound Data

	63	125	250	500	1000	2000	4000	8000	(Hz)	LwA:	64
Sound Power Level @ Frequency, re: 10 <sup>-12</sup> Watts	78	72	66	62	56	51	47	45	(dB)	SONES:	6.8
Ducted inlet <u>or</u> ducted outlet dBA @5 ft. 53						Ducted inlet <u>and</u> ducted outlet dBA @5 ft. 33					

## Performance Curve

DELHI Model 9220VIB  
CFM=5500 SP=0.5 BHP=1.15 S. Eff=38% RPM=432



**Note:** Fan supplier subject to change by BPE without notice



# Fan Selection

## Drive Information

Motor Pulley	Turns Open	Blower Pulley	Bushing	Belt
8400 x 1-1/8" \ 8500038	4	MBL127 \ 8500009	H x 1-7/16 \ 8500065	B78 \ 8200078

## Motor Data

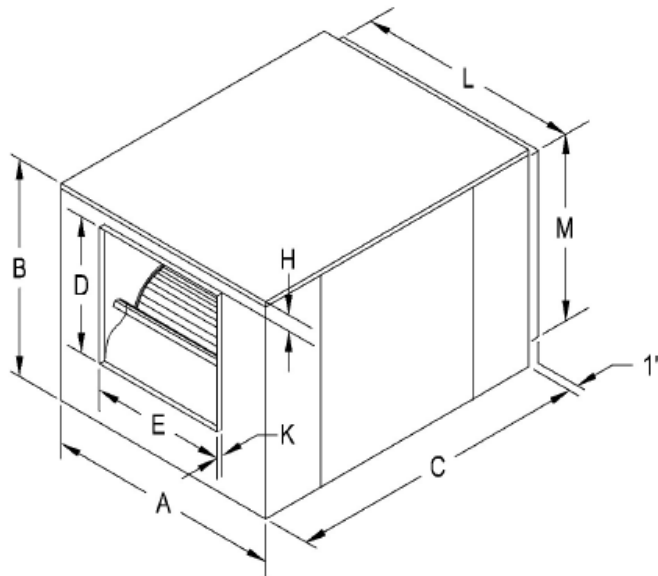
Motor HP and Type	Volts/Phase	Frame	Motor RPM	Position	Canarm Part Number
3 ODP	115/230/1 Phase	184	1725	1	1MD117

## Options

## Dimensions

Model: 9220VIB

(Inches)



<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>H</u>	<u>K</u>	<u>L</u>	<u>M</u>
44.75	41.125	57.5	25.75	25.75	3.0	1.125	38.375	35.125

## Standard Features

### 9200 VIB Series Duct Blowers (In-line Cabinet Fans)

- Forward curved wheel provides quiet, low rpm operation.
- Internal spring isolation further reduces sound radiation.
- Cabinet is galvanized steel for outdoor use with baked on textured green polyethylene powder coat finish.
- Fiberglass insulation reduces noise, condensation, and energy costs.
- Self aligning Pillow Block Bearings.
- Access panels for convenient motor mounting on either side.



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