



Building Performance Equipment, Inc.®

Sustainable, Reliable, Energy Efficient, Ventilation Systems



BPE-SC-UNI-12000 Commercial Installation Specifications and Guidance

BPE Inc.
80 Broadway, Hillsdale, NJ

Phone: 201-722-1414
info@bpequip.com





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 12000 cfm ERV with necessary components and information provided. Please contact us at 201-722-1414 if you have any questions.



Building Performance Equipment, Inc.®

Sustainable, Reliable, Energy Efficient, Ventilation Systems



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.

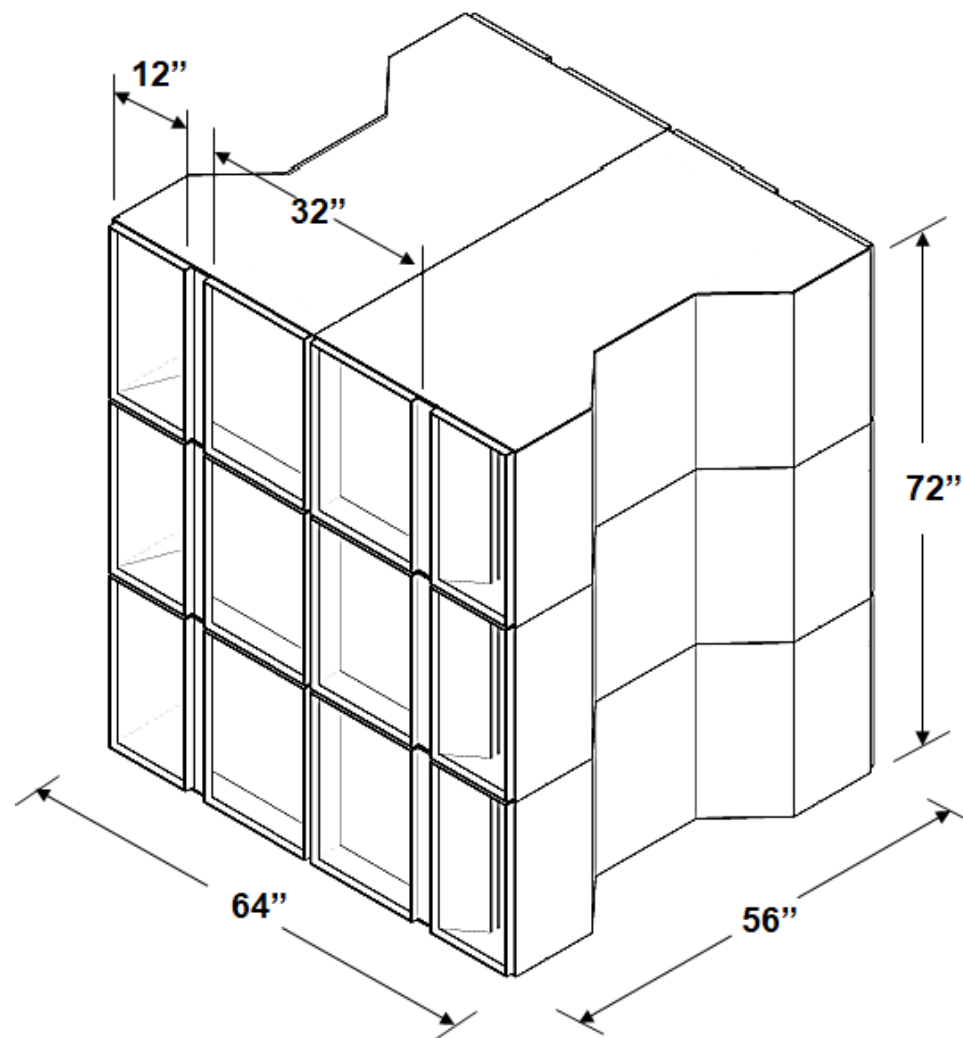


BPE-SC-UNI-12000

Specifications

Model Number	BPE-XE-MIR 12000, Energy Recovery Ventilator (ERV)
Ventilation Type	Fixed Plate Polymer, Heat and Humidity Transfer
Typical Air Flow Range	8000-12000 cfm
Thermal Efficiency	71% @ 11000 cfm 81% @ 8000 cfm
Product Weight/ Shipping Weight	1212 lbs./1300 lbs.
Shipping Dimensions	(6) 56" L x 24" W x 32.5" H
Typical Fan	CANARM 9220-VIB Inline Duct Blower (See page 8)

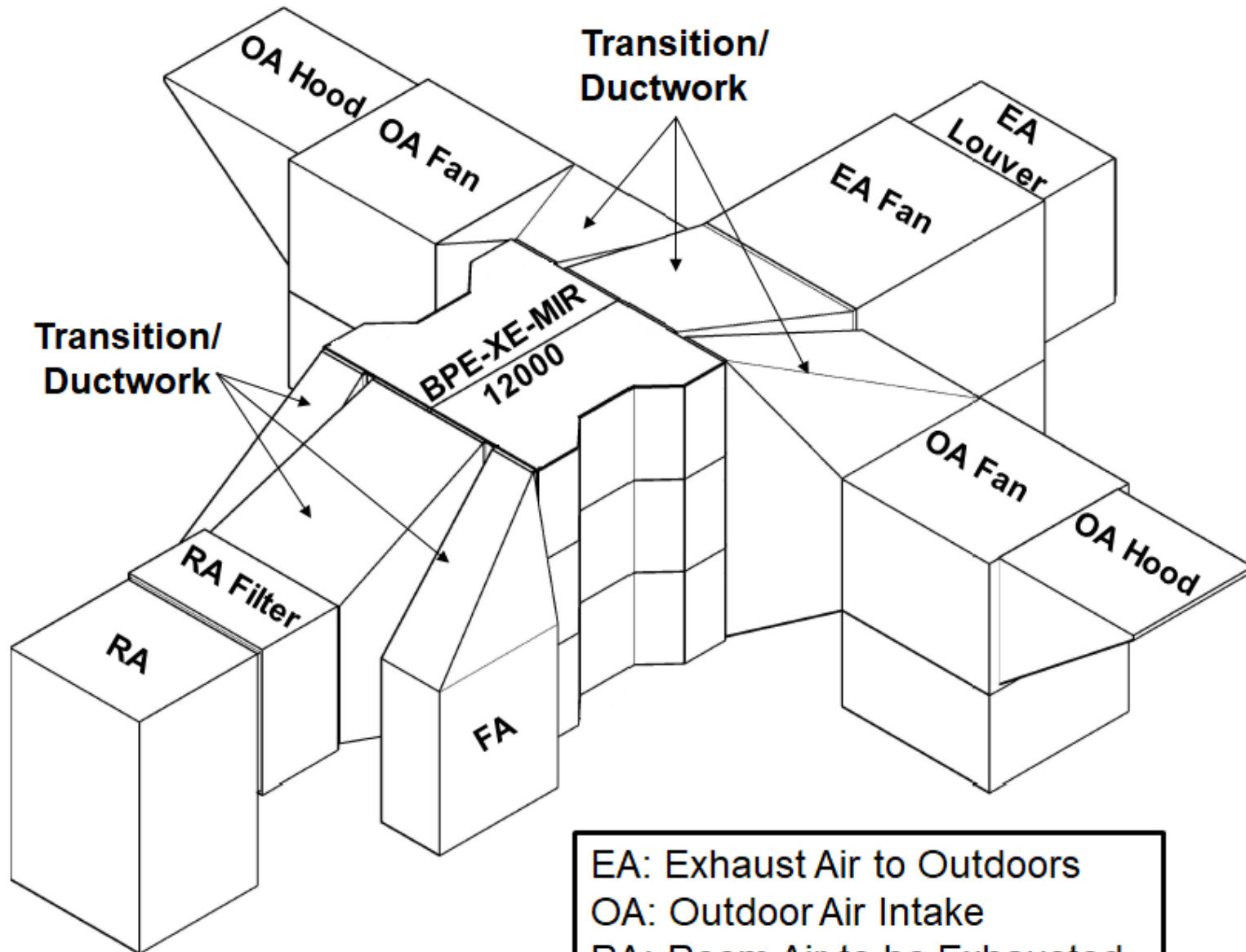
Note: Dimensions subject to change without notice





BPE-SC-UNI-12000

Layout

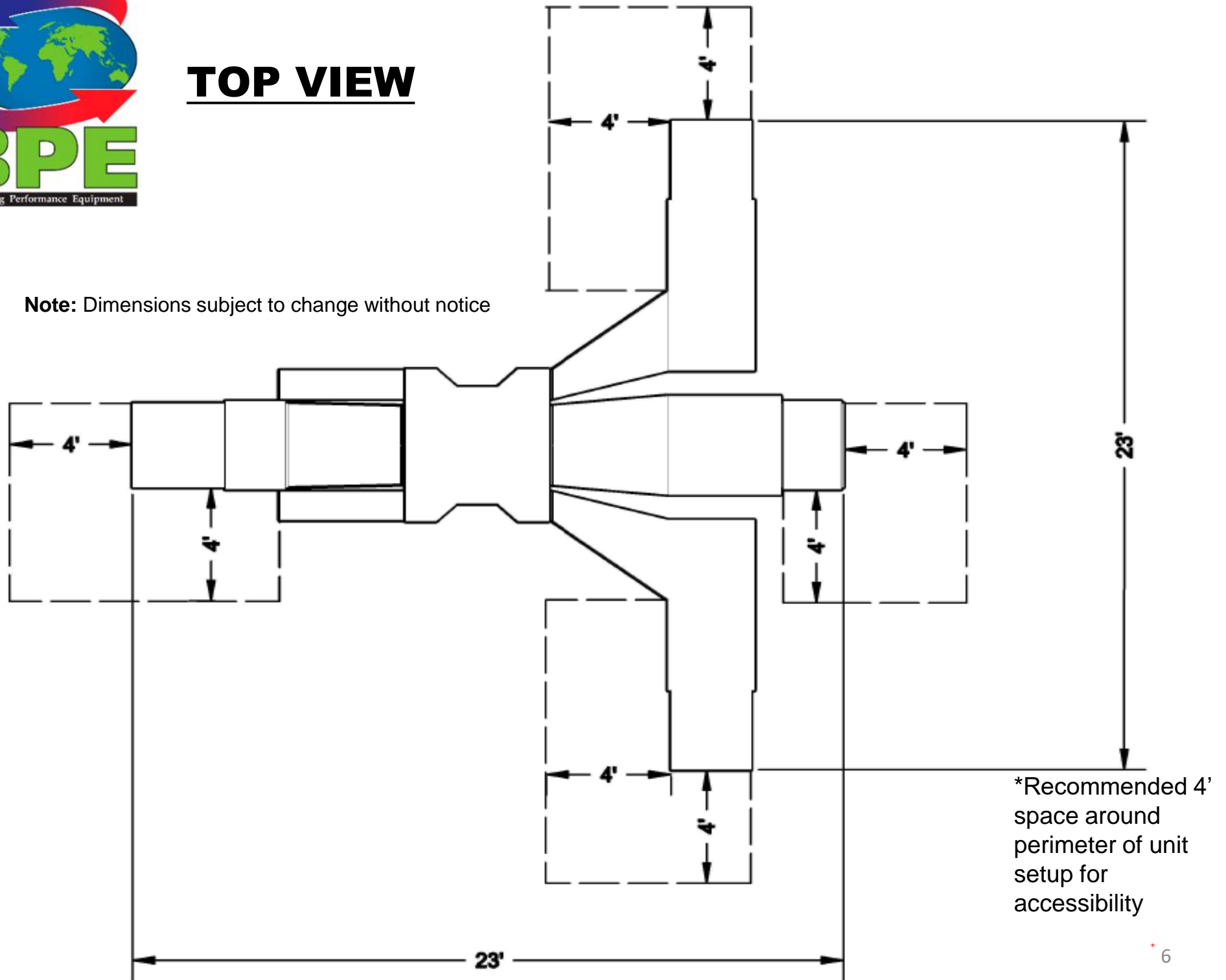


EA: Exhaust Air to Outdoors
OA: Outdoor Air Intake
RA: Room Air to be Exhausted
FA: Fresh Air to Inside



TOP VIEW

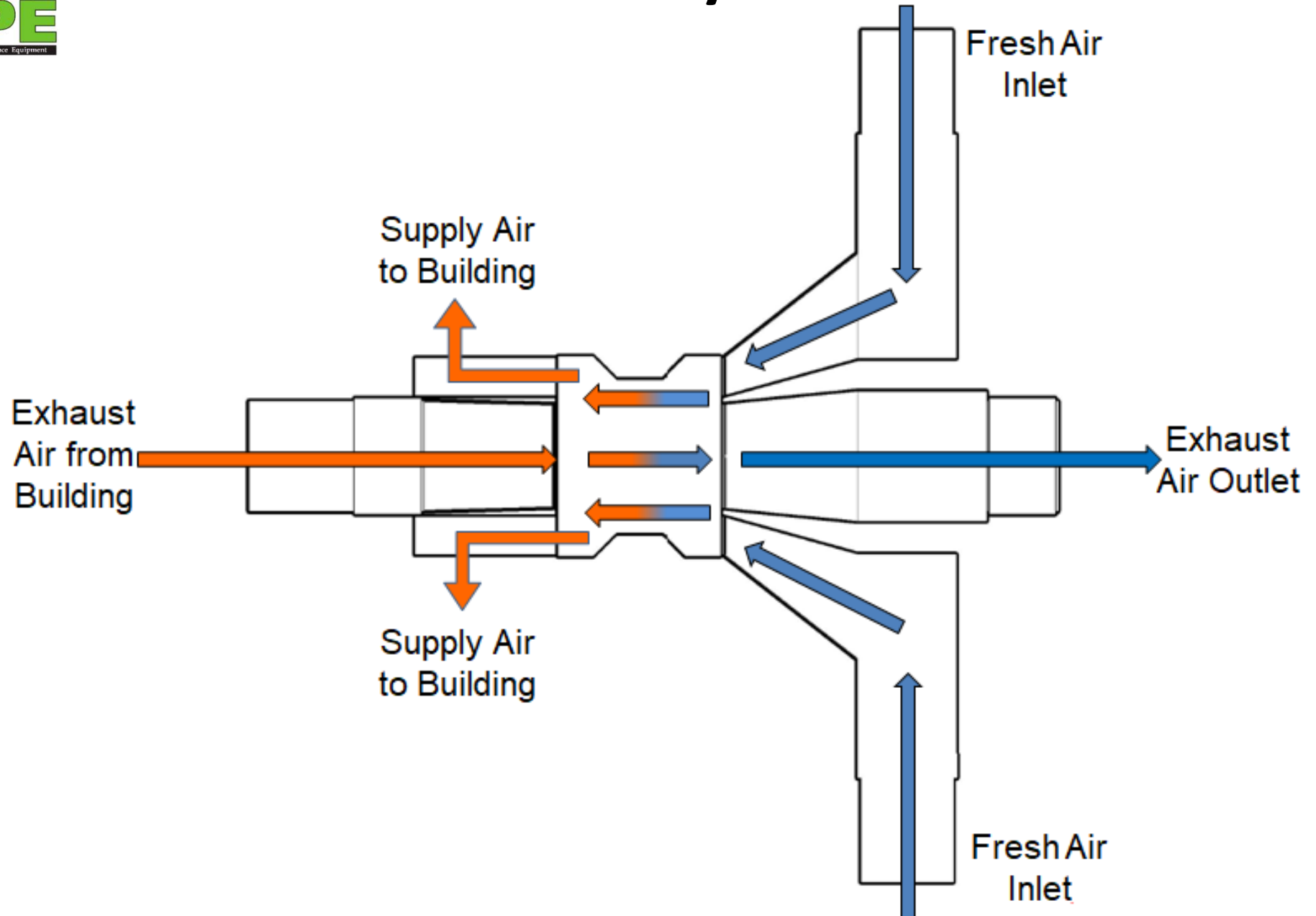
Note: Dimensions subject to change without notice



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

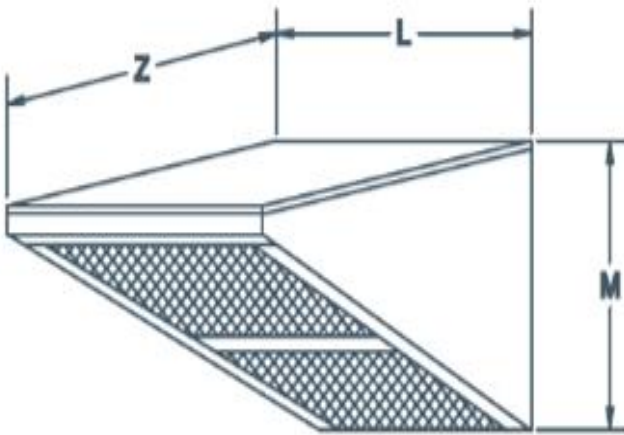


BPE-SC-UNI-12000 Layout



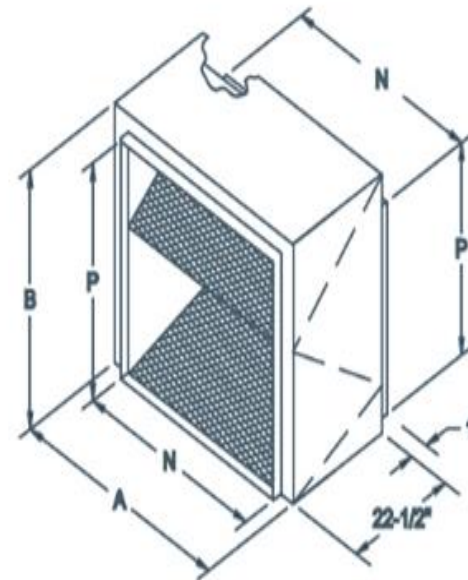
Intake Hood & Filter Selection

H9218 Intake



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

F9215A 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: 8000	Shaft Diameter: 1.4375	Unit Weight: 515
SP: 0.5	Wheel Diameter: 20.4375	Ship Weight: 574
RPM: 509	Tip Speed: 2723 FPM	
BHP: 2.47	Static Efficiency: 25	Elevation: 0
	Outlet Velocity: 1737 FPM	Temperature: 70

Sound Data

Sound Power Level @
Frequency, re: 10⁻¹² Watts

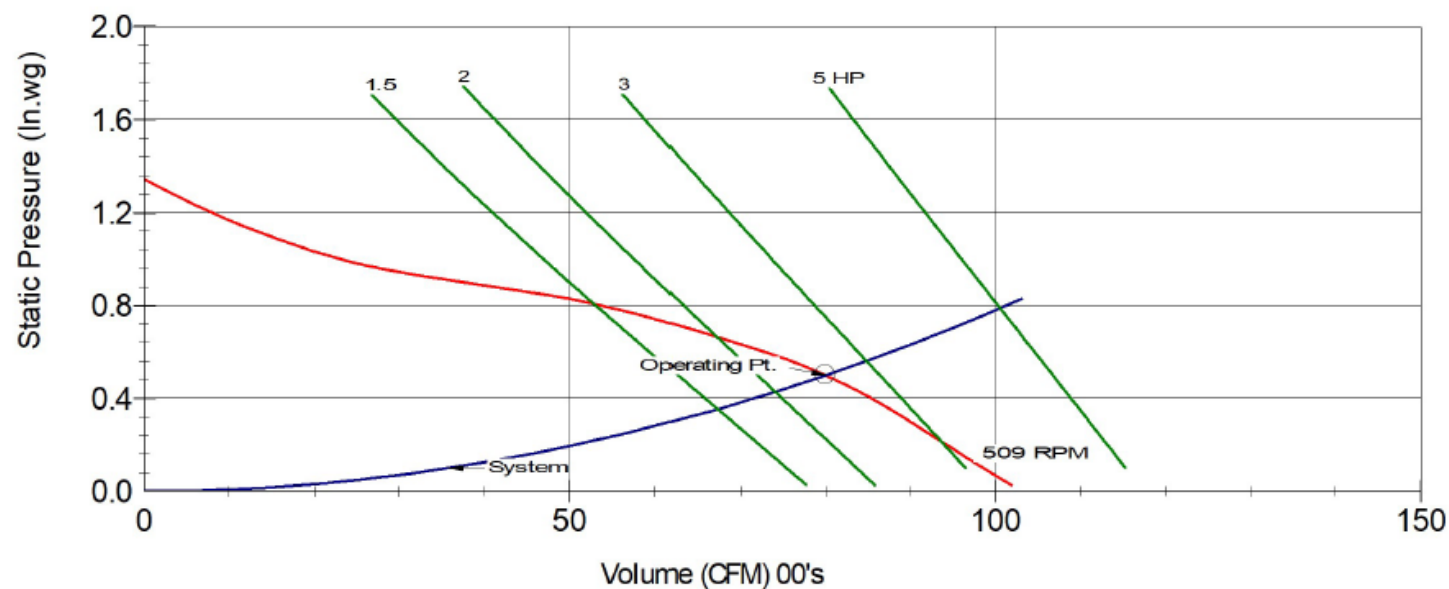
63	125	250	500	1000	2000	4000	8000	(Hz)	LwA: 71
85	80	73	70	63	58	53	51	(dB)	SONES: 11

Ducted inlet or ducted outlet dBA @5 ft. 60

Ducted inlet and ducted outlet dBA @5 ft. 40

Performance Curve

DELHI Model 9220VB
CFM=8000 SP=0.5 BHP=2.47 S. Eff=25% RPM=509



Note: Fan supplier subject to change by BPE without notice



Fan Selection

Drive Information

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

Motor Data

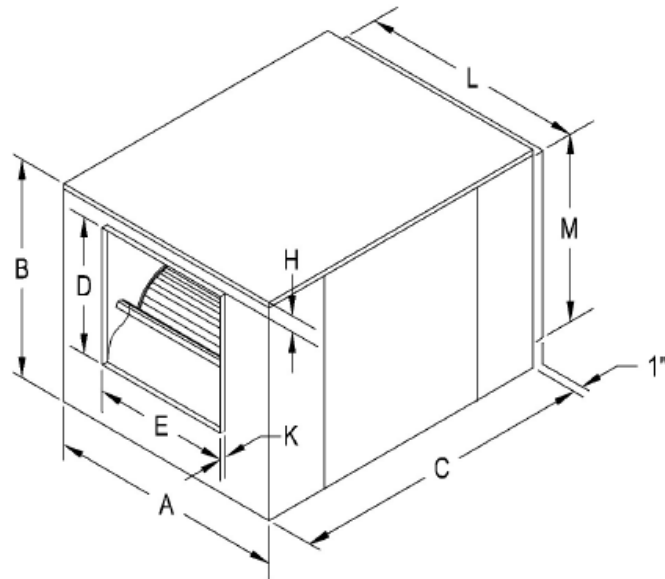
Motor HP and Type 3 ODP	Volts/Phase 115/230/1 Phase	Frame 184	Motor RPM 1725	Position 1	Canarm Part Number 1MD117
----------------------------	--------------------------------	--------------	----------------------	---------------	------------------------------

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.



Note: Fan supplier subject to change by BPE without notice