

# Dust/Mist/Smoke Collector

## AerPro™ Model ClearAER 2MV & 2MVPF



### FEATURE & BENEFITS

- COMPACT SIZE
- HIGH EFFICIENCY
- LOW OPERATING COSTS/MAINTENANCE
- TOOL-LESS ACCESS
- MADE IN USA
- 2 YEAR WARRANTY

### OPTIONS

- Mounting brackets
- Silencer reduces noise by 6 dBA
- 2 HP Model MV2PF, 230/460/3/60, wired to junction box

### THE AERPRO MODEL CLEARAER 2MV & 2MVPF IS DESIGNED TO GIVE YOU CLEAN AIR FROM:

- DUST (ALL) • FUME (LASER, PLASMA, WELD) • OIL MIST
- OVERSPRAY (PAINT, METALIZING) • SMOKE (DRY/OILY)

### SPECIFICATIONS:

- 3000 CFM maximum air flow
- (2) 30-40% multivee prefilters
- (2) 95% Micro Glass Vee Bags Main Filters
- 24" H x 24"W x 72"L (for prefilter L = 108")
- Hanging weight 260 pounds (MVPF = 365 lbs.)
- 3/4 HP Blower, 115/1/60
- Two Speed with 10' power cord
- 16 Gauge construction
- Painted dark blue chemical resistant paint
- 82 dBA

### AERPRO MODEL 2MV & 2MVPF

The AerPro Model 2MV or 2MVPF (with large wrap around prefilter) is designed for safe and efficient ambient collection of process dusts, mist, and smoke. The efficient 3/4 HP (2MV) or 2 HP (2MVPF) blower moves up to 3000 CFM (cubic feet per minute). Filter efficiencies are rated at MERV 14 which replaces ASHRAE 52-76.

The air cleaning begins with the air entering through the two 4" disposable prefilters and continuing through the two 95% efficiency rated micro glass filters. The "T" shape air flow allows for very effective cross flow room patterns.

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Gulftech  
Enterprises, Inc.

## Concept of Ambient of Free-Hanging Air Cleaners

- **Ambient or Free hanging** - Locating air cleaners in a space which they are free to blow and draw air as they can. No ductwork is connected between the unit and where the particulate is created.
- **"T" or Criss-Cross Air Pattern** - Locating air cleaners in a facility such that a pattern of air discharged from the air cleaner crosses the area to be captured by another in a back and forth pattern, from unit to unit.
- **Race track pattern** - Locating air cleaners in a facility such that air is caused to move around the space in a oval racetrack pattern.

The "T" cross flow allows for the unit(s) to blow across the room with the airflow coming into the unit from each end. This type of air pattern is very useful for wide rooms or areas such as welding bays.

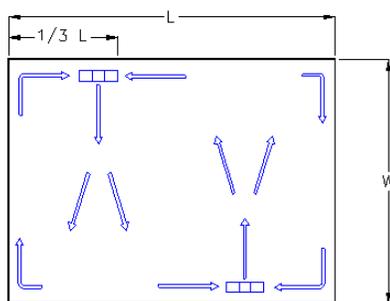
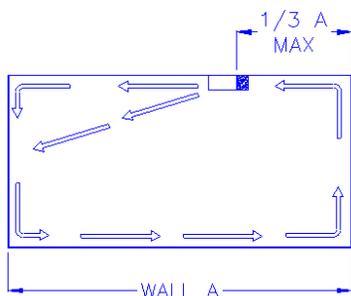
Therefore, it is a common misconception that the dirty air is sucked into the unit, where in fact, the dirty air is blown into the suction zone. The inlet area acts like a catcher's mitt. One question that is always asked, is how does the dirty air in the center of the room get to the unit? When the unit(s) are on, the air stream coming from the blower produces a high pressure zone. The inside air is a low-pressure zone. The low-pressure zone rotates to the direction of the high pressure and slowly feeds into the high-pressure air stream.

There is always a portion of the dirty air rising into the airstream in addition to the amount of suspended dirty air particles trying to get captured in the air-stream. Because of this limitation a free hanging system can never achieve 100% efficiency. However, efficiencies that range from 60% to 90% can be achieved.

### CALCULATE THE VOLUME OF THE ROOM

**Multiply the width x the length x the height**

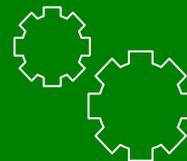
**Ex. 30' x 120' x 10' = 36,000 ft<sup>3</sup>**



### Potential Return of Investment

#### Benefits from Clean Air

- Help comply with OSHA.
- Improve health resulting in lower insurance costs.
- Improve corporate image as a "clean place to work".
- Reduce energy costs from eliminating heated or cooled air.
- Improve manufacturing quality by preventing contaminants from paint areas to sensitive electronics.
- Lower maintenance such as tracking dirt into the offices and less painting.



### **An example of an air change: Wood Shop 30 x 40 x 20H**

Always figure cubic feet first. Therefore, 30 x 40 x 20 = 24,000 cubic feet. Divide total cubic feet by # of minutes of air change required.

Since the above is a light wood dust application 24,000/10 minute air change = 2,400 CFM. If the area had very heavy dust 24,000/5 minute air change = 4,800 CFM.

*AerPro has been manufacturing quality air products for over 10 years. Today its products are sold and serviced by the best and most experienced distributors throughout North America and the Far East.*

