

PRISM[®] SUSPEND 4000 SYSTEM

CEILING OR WALL MOUNTED CIRCULATOR



KEY FEATURES

The Prism Suspend 4000 System is a series of multiple circulators that are mounted across from each other, above the shop floor, to circulate and filter ambient air to reduce contamination levels in a welding shop. The Prism Suspend 4000 can be easily mounted to an I-beam, flat ceiling or wall, freeing up floor space. Ideal as an ambient system for heavy fabrication, this unit features automatic filter cleaning without the need for user interaction, lengthening filter life.

- » Easily mounted
- » Small footprint
- » Ductless push pull system
- » Longer filter life
- » Energy efficient fan
- » Ambient air capture

Processes »

Stick, TIG, MIG, Flux-Cored

Product Number »

AD2496-1 (460V, CEILING MOUNT)
AD2496-2 (230V, CEILING MOUNT)
AD2496-3 (460V, WALL MOUNT)
AD2496-4 (230V, WALL MOUNT)

Input »



230V or 460V 3-phase Fan
115V or 230V single phase controls



KEY FEATURES Continued

- » **Hang/mount** – Ceiling or wall mounted to take up less floor space.
- » **Ductless push/pull system** – Eliminates the need for ductwork, reducing installation costs by up to 30%.
- » **Installation** – After approval by a licensed structural engineer, the unit can be mounted to an I-beam, flat ceiling or wall.
- » **Long filter life** – Features stepped cleaning for extended filter life.
- » **Energy efficient** – New, energy efficient electronically commutated (EC) fan that maintains constant SCFM throughout filter life.

IDEAL APPLICATIONS

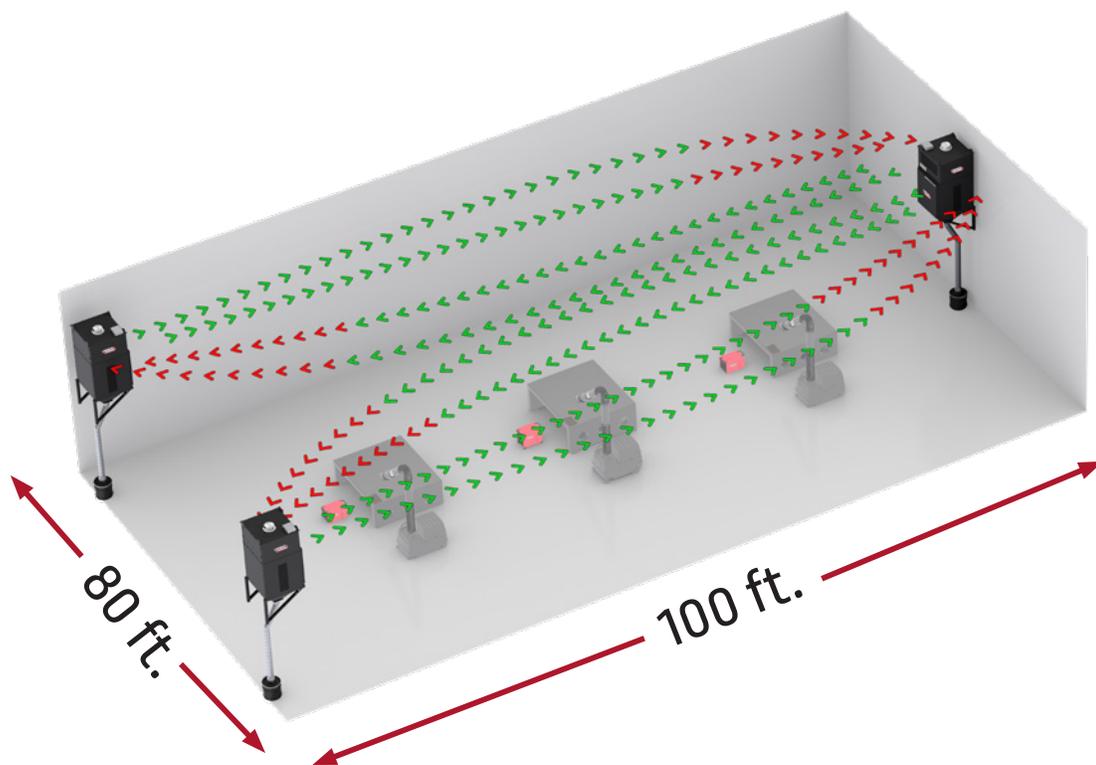
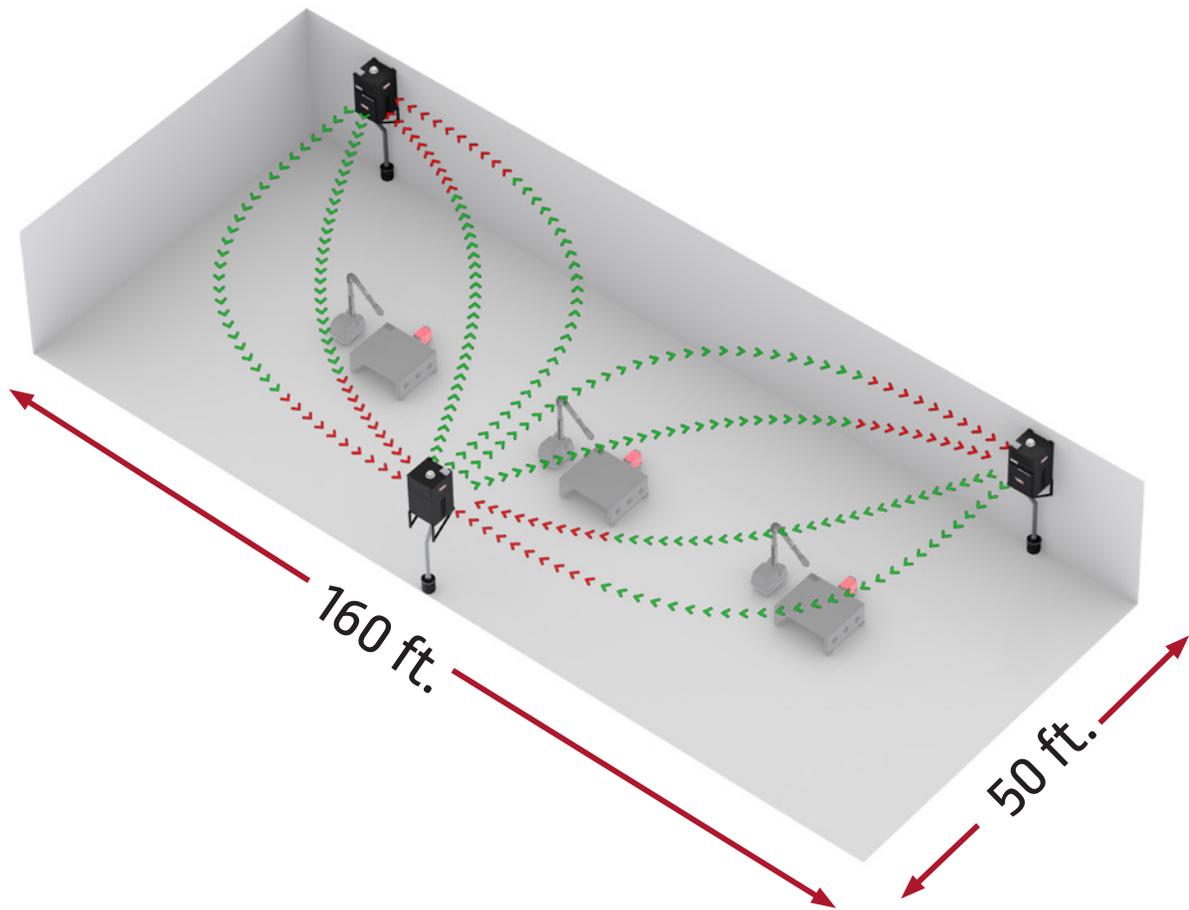
1. General welding and cutting fabrication where heavy welding or robotic welding source capture is not practical.
2. Ambient capture in workspaces with lack of available floor space
3. Ambient capture where workspace configuration flexibility is desired

FUNCTIONALITY

Prism Suspend 4000 is an ambient push/pull system. Multiple units are strategically located to push air across the workspace and maximize weld fume capture through each unit's side intakes. Automatic filter cleaning requires no user interaction outside of routine maintenance and smart controls maximize filter life by controlling frequency of cleaning cycles.



System layout possibilities include but are not limited to the following:



THROW DISTANCE

| Airflow CFM (m ³ /hr) | *Max Throw Distance ft (m) |
|----------------------------------|----------------------------|
| 4000 (6796) | 120 (36.6) |
| 3000 (5097) | 90 (27.4) |
| 2000 (3398) | 70 (21.3) |

* At terminal velocity of 80 ft/min (0.4 m/s)

PRODUCT SPECIFICATIONS

| Product Name | Product Number | Input Power/Voltage/Phase/Hertz | Motor Horsepower HP | Input Current (Amps) | Number of Filters | Airflow (CFM) | Clearance Needed | Filter Cleaning Control | HxWxD in (mm) | Weight lb (kg) |
|-------------------------------------|----------------|---|---------------------|------------------------------------|-------------------|---------------|---------------------------------------|-------------------------------|--------------------------------------|-----------------|
| Prism Suspend 4000 Hanging 460 Volt | AD2496-1 | 380-480V/3-/50-60Hz (FAN) 115-230V/1-/50-60Hz (CONTROLS) | 7.6 | 9 max (fan) 2 max (controls) | 4 | 4000 | 4 ft sides 4 ft front 1 ft rear | Compressed Air (72 - 87 psi)* | 97 x 45 x 48 (2464 x 1143 x 1219) | 1241** (563) |
| Prism Suspend 4000 Hanging 230 Volt | AD2496-2 | 200-240V/3-/50-60Hz (FAN) 115-230V/1-/50-60Hz (CONTROLS) | 8.6 | 19.5 max (fan) 2 max (controls) | | | | | | |
| Prism Suspend 4000 Wall Mount 460 | AD2496-3 | 380-480V/3-/50-60Hz (FAN) 115-230V/1-/50-60Hz (CONTROLS) | 7.6 | 9 max (fan) 2 max (controls) | | | | | | 1261** (572) |
| Prism Suspend 4000 Wall Mount 230 | AD2496-4 | 200-240V/3-/50-60Hz (FAN) 115-230V/1-/50-60Hz (CONTROLS) | 8.6 | 19.5 max (fan) 2 max (controls) | | | | | | |

*87 psi supply for best system performance (air regulator supplied with unit)

** Accounting for live loads, the unit's total design force is rated at 2200 lbs. (998 kg)

GENERAL INSTALLATION GUIDELINES

1. MINIMUM CEILING HEIGHT REQUIRED (wall mount): 140 in. (3556 mm)
2. MINIMUM CEILING HEIGHT REQUIRED (hanging mount): 140 in. (3556 mm) (roof structure/hanging interface may require more)
3. TARGET INSTALLATION HEIGHT FOR HIGH CEILINGS: 20 ft. (1680 m) (floor to top of unit's housing)
4. TOP OF FAN MOTOR TO BE 17 in. (204 mm) BELOW ROOF STRUCTURE OR OBSTRUCTION

The installation of this unit (including but not limited to the building structure, brackets, hardware and any other structural supports) shall be approved by a structural engineer licensed in the governing jurisdiction.

The operation of welding fume control equipment is affected by various factors including proper use and positioning of the equipment, maintenance of the equipment and the specific welding procedure and application involved. Worker exposure level should be checked upon installation and periodically thereafter to be certain it is within applicable OSHA PEL and ACGIH TLV limits.

Lincoln Electric Product Claim - Weld fume control products manufactured by The Lincoln Electric Company are designed to be utilized as an engineering safety control to aid in achieving adequate ventilation while conducting welding or it's allied processes. The operation of welding fume control equipment is affected by various factors including proper use and positioning of the equipment, and the specific welding procedure and application involved. When the equipment is used as designed - and when properly installed, operated and maintained - it can be a valuable and effective tool to help employers maintain adequate ventilation in the workplace. Lincoln Electric defines adequate ventilation as that which is required to maintain occupational exposure levels below the applicable exposure limits when sound work practices are utilized. Worker exposure level should be checked upon installation and periodically thereafter to be certain it is within applicable OSHA PEL and ACGIH TLV limits.

Lincoln Electric weld fume control products are highly effective at decreasing the occurrence level of thermal events, however, thermal events can still happen even if the system is operating as designed.

CUSTOMER ASSISTANCE POLICY

The business of Lincoln Electric is manufacturing and selling high quality welding equipment, automated welding systems, consumables, and cutting equipment. Our challenge is to meet the needs of our customers, who are experts in their fields, and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or technical information about their use of our products. Our employees respond to inquiries to the best of their ability based on information and specifications provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment, or to provide engineering advice in relation to a specific situation. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or communications. Moreover, the provision of such information or technical information does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or technical information, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose or any other equivalent or similar warranty is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the definition of specifications, and the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.

The Lincoln Electric Company
22801 St. Clair Avenue · Cleveland, OH · 44117-1199 · U.S.A.

www.lincolnelectric.com