

# FILTAIR® Extraction Arms

**Welding Safety and Health** 

## Quick Specs

### Industrial Applications

Schools and training facilities  
Manufacturing and fabrication  
Fixed welding cells/stations

### Processes

Stick (SMAW)  
Flux-cored (FCAW)  
MIG (GMAW)  
TIG (GTAW)

### Extraction Arm Diameter

6 in. (152.4 mm) or 8 in. (203 mm)

### Extraction Arm Length

**Telescoping:** 3–4.5 ft. (0.9–1.4 m)  
**Standard:** 7, 10, or 12 ft. (2.1, 3.0 or 3.7 m)  
**ZoneFlow™:** 10 or 12 ft. (3.0 or 3.7 m)

### Recommended CFM

**6 in. diameter arms:** 500–640 cfm  
**8 in. diameter arms:** 875–1,135 cfm

### Extraction Arm Net Weight

**Telescoping:** **6 in.:** 21 lb. (9.5 kg)  
**8 in.:** 22 lb. (10 kg)  
**Standard:** **6 in. x 7 ft.:** 37 lb. (17 kg)  
**6 in. x 10 ft.:** 39 lb. (18 kg)  
**6 in. x 12 ft.:** 42 lb. (19 kg)  
**8 in. x 7 ft.:** 79 lb. (36 kg)  
**8 in. x 10 ft.:** 84 lb. (38 kg)  
**8 in. x 12 ft.:** 87 lb. (39 kg)  
**ZoneFlow:** **6 in. x 10 ft.:** 83 lb. (38 kg)  
**6 in. x 12 ft.:** 89 lb. (40 kg)  
**8 in. x 10 ft.:** 91 lb. (41 kg)  
**8 in. x 12 ft.:** 99 lb. (45 kg)

**FILTAIR extraction arms are preassembled, easy to operate and designed to capture weld fume.**

FILTAIR extraction arms are designed to be mounted to a wall, pedestal or column, and are for use in a variety of welding applications.

All arms are available in 6- or 8-inch diameters, with a range of lengths available from the shorter telescoping arm up to the 12-foot standard and ZoneFlow arms.

For a complete weld fume capturing solution, connect an arm to FILTAIR SWX or Centralized system or competitive equipment.

**The capture zone redefined. Innovative, extended-capture fume extraction system designed specifically for welding.**

Exclusive ZoneFlow™ technology creates a much larger capture area than existing source-capture products and minimizes arm interactions. See page 5 for more information.

Have a certified industrial hygienist test the air in your facility to determine equipment requirements and ensure adequate protection from contaminants.



**Telescoping arms are ideal for smaller spaces.** Designed to fit small booths and spaces like those found in training, educational and light manufacturing settings, telescoping arms extend from 3 to 4.5 feet with a wide range of motion to cover all positions.

**Standard and ZoneFlow™ arms are designed to cover larger spaces.** Standard extraction arms are available in 7-, 10-, and 12-foot versions while ZoneFlow arms are available in 10- and 12-foot versions. External brackets and adjustments allow air to pass through with less resistance giving you stronger cfm (airflow).

**When to use 6-inch or 8-inch arms.** The 6-inch arm requires less overall cfm than an 8-inch arm, and is best suited to hood placement within 12 inches of the work area for fume collection.

An 8-inch arm is capable of delivering approximately 45 percent more airflow, and the hood can be placed further from the welding area (up to 16 inches). Additionally, the conical hood is larger in diameter and capable of collecting from a broader area. Typically the 8-inch arm is used in heavy manufacturing for larger weldments.



Extraction arms are warranted for one year, parts and labor.



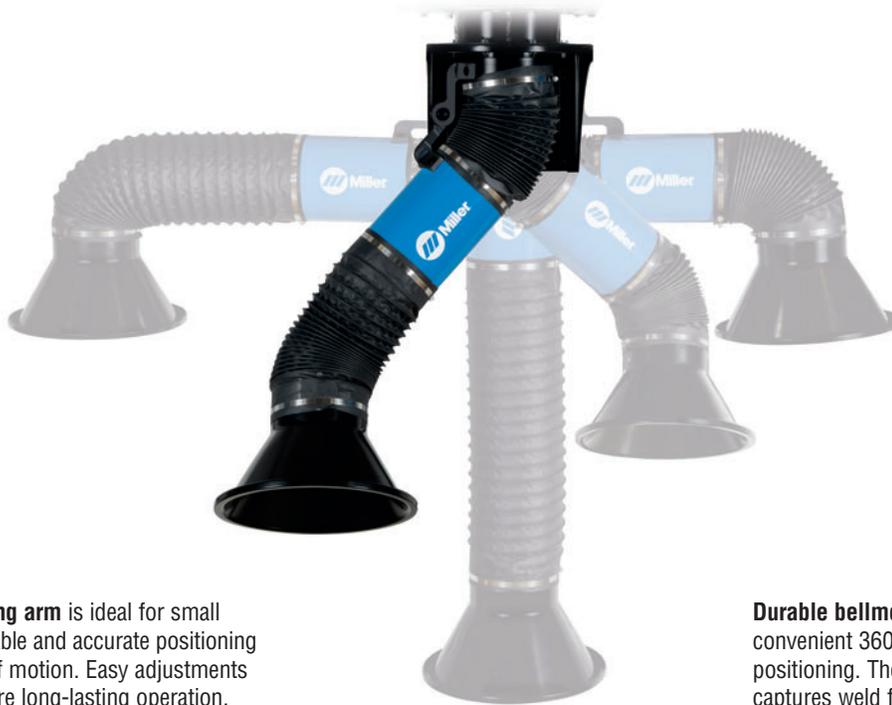
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**MillerWelds.com**  



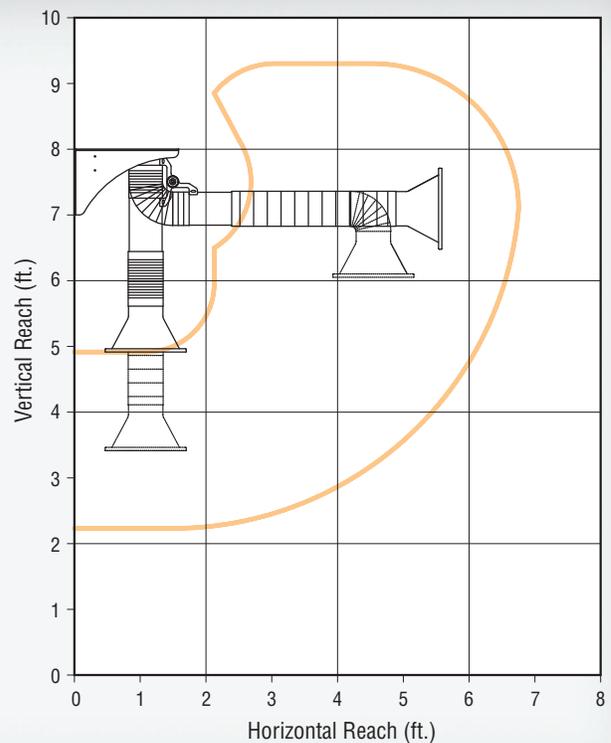

## Telescoping Extraction Arm



**Easy-to-use telescoping arm** is ideal for small spaces, and offers reliable and accurate positioning across the full range of motion. Easy adjustments and maintenance ensure long-lasting operation. Pre-assembled telescoping arms can extend from 3 to 4.5 feet.

**Durable bellmouth-shaped hood** features convenient 360-degree rotation for unlimited positioning. The FILTAIR extraction hood captures weld fumes at a greater distance from the source than other hood designs, for fewer hood adjustments on longer welds.

### Telescoping Arm Coverage Area



## Standard Extraction Arm



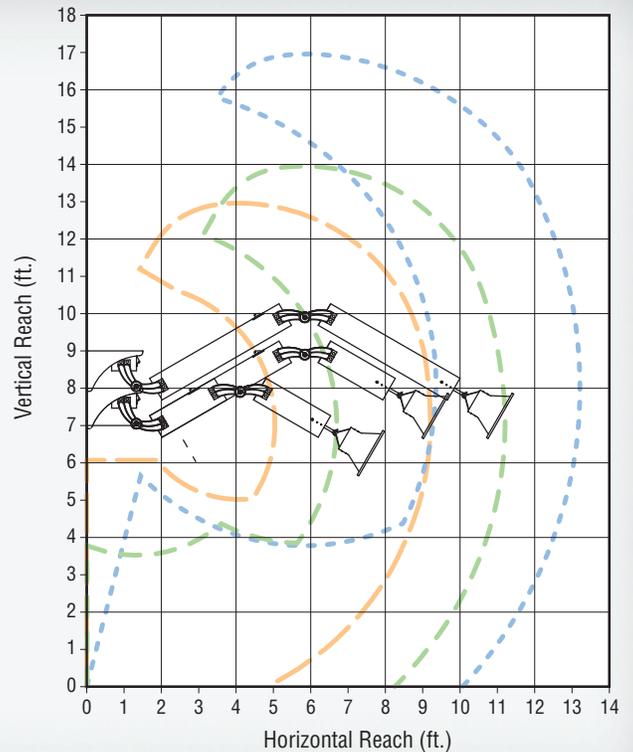
**Easy-to-operate standard arm** has external adjustments so air can pass through with less airflow resistance, giving you stronger cfm (airflow). It offers reliable and accurate positioning across the full range of motion, as well as easy adjustment and maintenance to ensure long-lasting operation. Pre-assembled extraction arms are available in 7-, 10- or 12-foot lengths.

**Durable bellmouth-shaped hood** features convenient 360-degree rotation for unlimited positioning. The FILTAIR extraction hood captures weld fumes at a greater distance from the source than other hood designs, for fewer hood adjustments on longer welds.



### Standard Arm Coverage Area

- 7 ft. Extraction Arm  
 Min. ceiling height:  
 12.33 ft. (3.8 m)
- 10 ft. Extraction Arm  
 Min. ceiling height:  
 13.33 ft. (4.1 m)
- 12 ft. Extraction Arm  
 Min. ceiling height:  
 14.33 ft. (4.4 m)

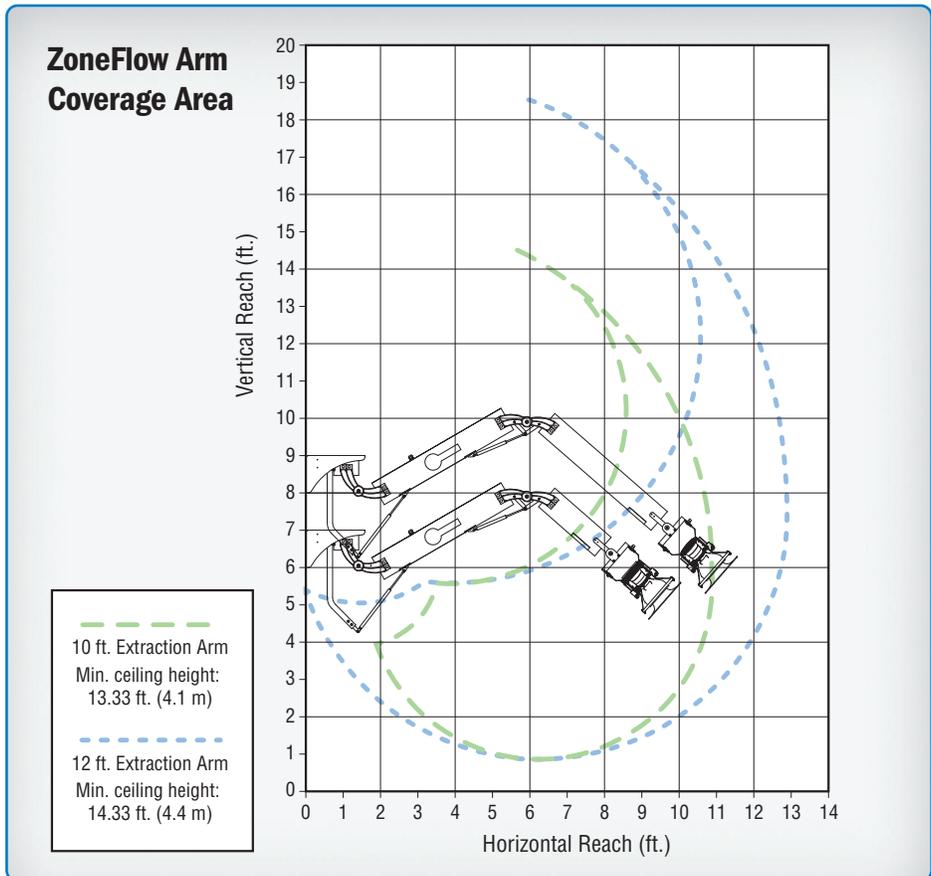


# ZoneFlow™ Extraction Arm and Motor Control Box



**Easy-to-operate ZoneFlow arm** with external adjustments so air can pass through with less airflow resistance, giving you stronger cfm (airflow). It offers reliable and accurate positioning across the full range of motion of the arm, as well as easy adjustment and maintenance to ensure long-lasting operation. Extraction arms are available in 10- or 12-foot lengths.

**ZoneFlow arm** creates a negative pressure zone that funnels air to the center of the arm from greater distances. The arm features convenient 360-degree rotation for unlimited positioning, which means fewer hood adjustments and extended welding time.

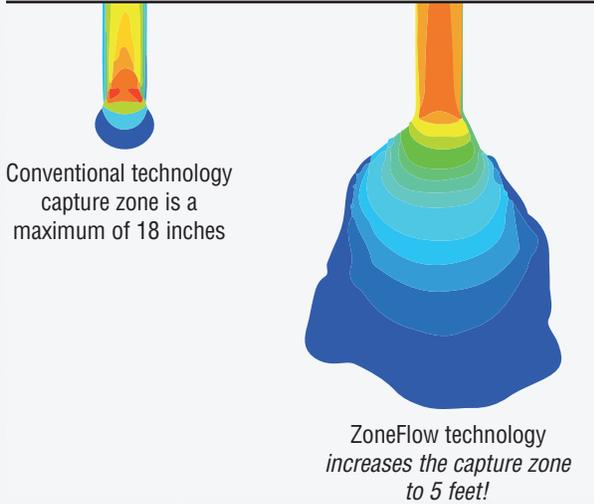


# ZoneFlow™ Technology

## Extend your fume capture zone

**Capturing fume at the source is critical to maintaining a clean breathing zone for the welder and keeping the facility clean.**

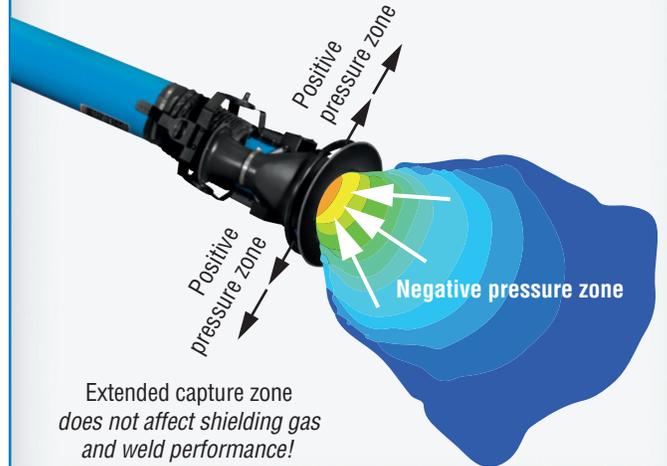
ZoneFlow technology offers up to five feet of fume extraction versus up to 18 inches from conventional source capture extractors. By increasing the area of weld fume capture, it dramatically reduces the amount of interaction a welder has with an arm.



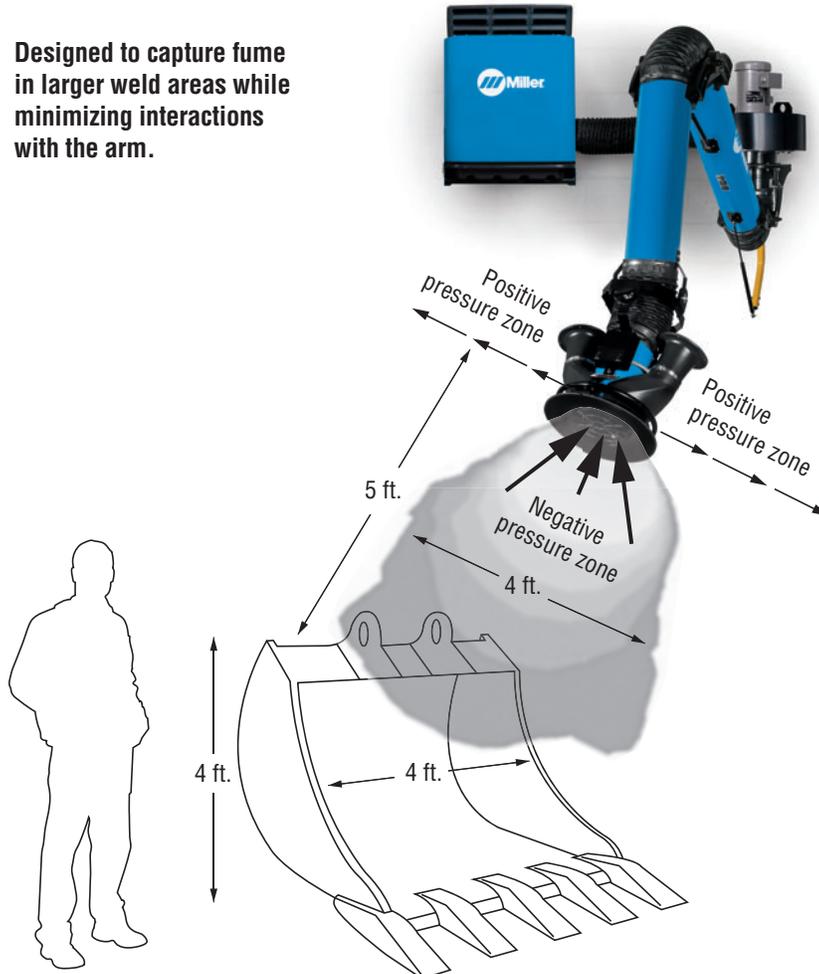
## ZoneFlow tech talk

**ZoneFlow technology creates a negative pressure zone that extends the weld particulate capture distance.**

Air moving into the arm is still about 900 cfm. However, ZoneFlow technology also moves clean, filtered air out of the arm at approximately a 90-degree angle which creates a large negative pressure zone. This negative pressure zone forms a type of curtain that funnels the weld fume particulate towards the center of the arm, maximizing capture and extending the capture zone up to five feet deep and four feet wide.



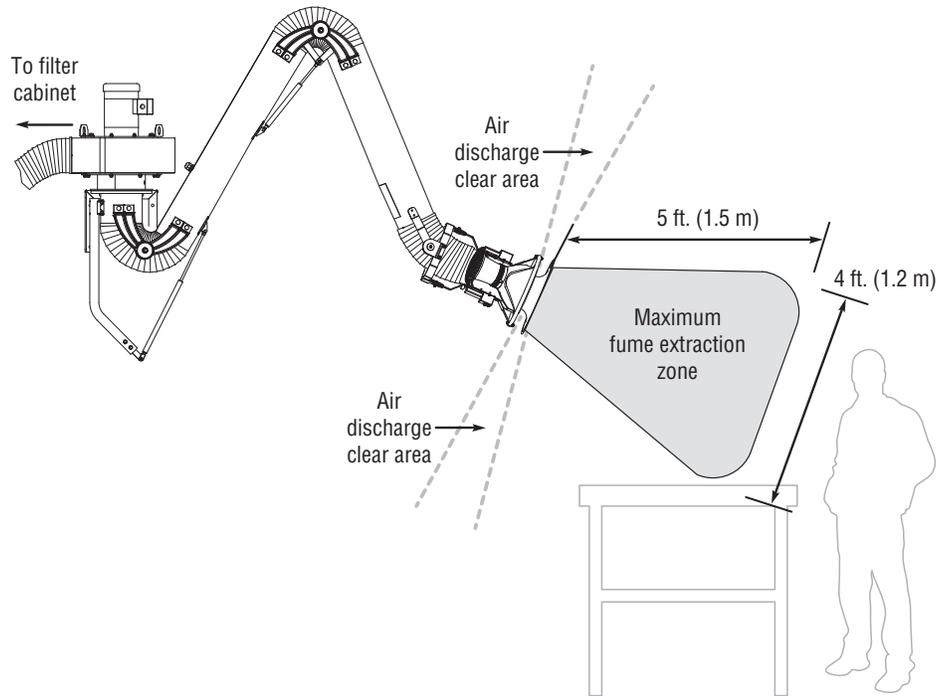
**Designed to capture fume in larger weld areas while minimizing interactions with the arm.**



# ZoneFlow™ Set-Up Guide

## 1. The fume extraction zone

ZoneFlow technology is designed to create a large, effective weld fume extraction zone. It will operate most effectively in areas where air currents or turbulence are minimal. When used properly, it will capture a large percentage of the fumes at the source, and the larger capture area will allow a welder to complete more welding while reducing interaction with the arm.



### Air discharge clear area

To maximize the fume extraction zone, **DO NOT OBSTRUCT AIR DISCHARGE** from the arm.



The arm discharges clean, filtered air just behind the hood at approximately a 90-degree angle, creating an “air curtain” that funnels the weld fumes towards the center of the arm, maximizing capture. Maintain at least a 5-foot clear area **ON ALL SIDES** of the hood to avoid disturbing this air discharge. Disrupting the flow will reduce the amount and distance of fume captured.

## 2. Hood position and operator safety

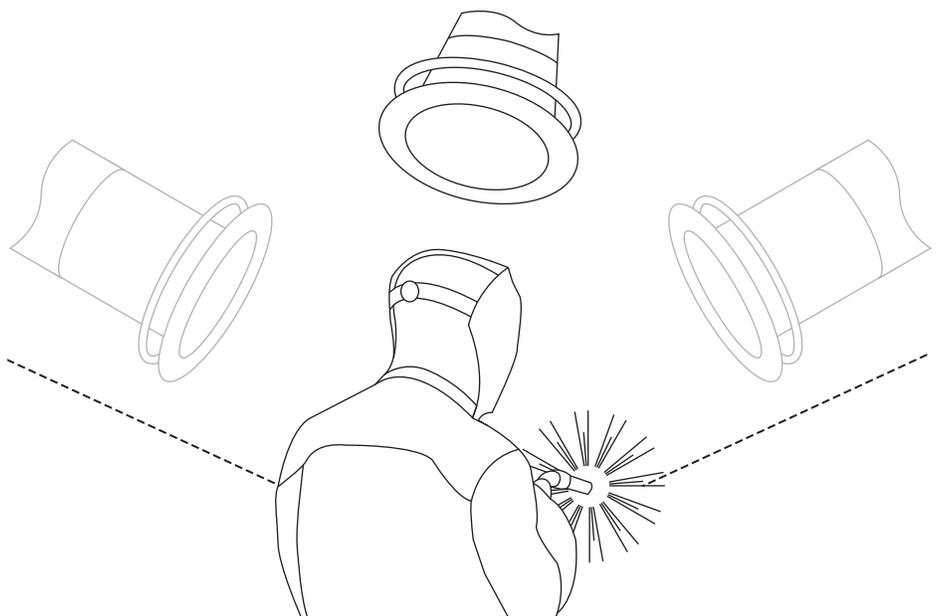
ZoneFlow technology is designed to help protect the user from welding-specific airborne contaminants but must be used correctly to be fully effective.

Position the hood in front of or at side of the weld area in order to draw weld fumes **AWAY** from the operator. To maximize the extraction zone the angle of arm should be 30–45 degrees off horizontal.

**DO NOT** position the hood behind the welder, or in any other place that will cause the weld fumes to be pulled across the welder or through his breathing space.

**BE AWARE** that air turbulence or movement may disrupt the effectiveness or position of the fume extraction zone and increase the possibility that the welder may encounter weld fumes.

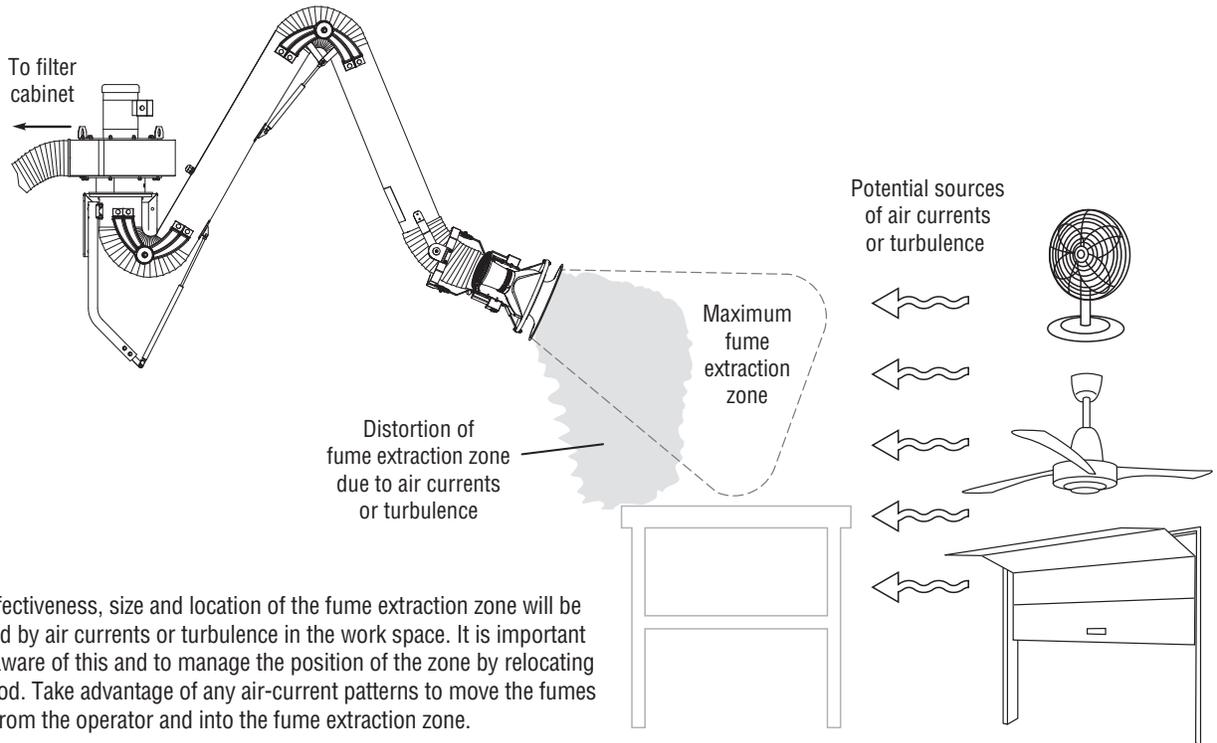
**KEEP HEAD OUT OF FUMES!**



# ZoneFlow™ Set-Up Guide

## 3. The effects of air currents or turbulence

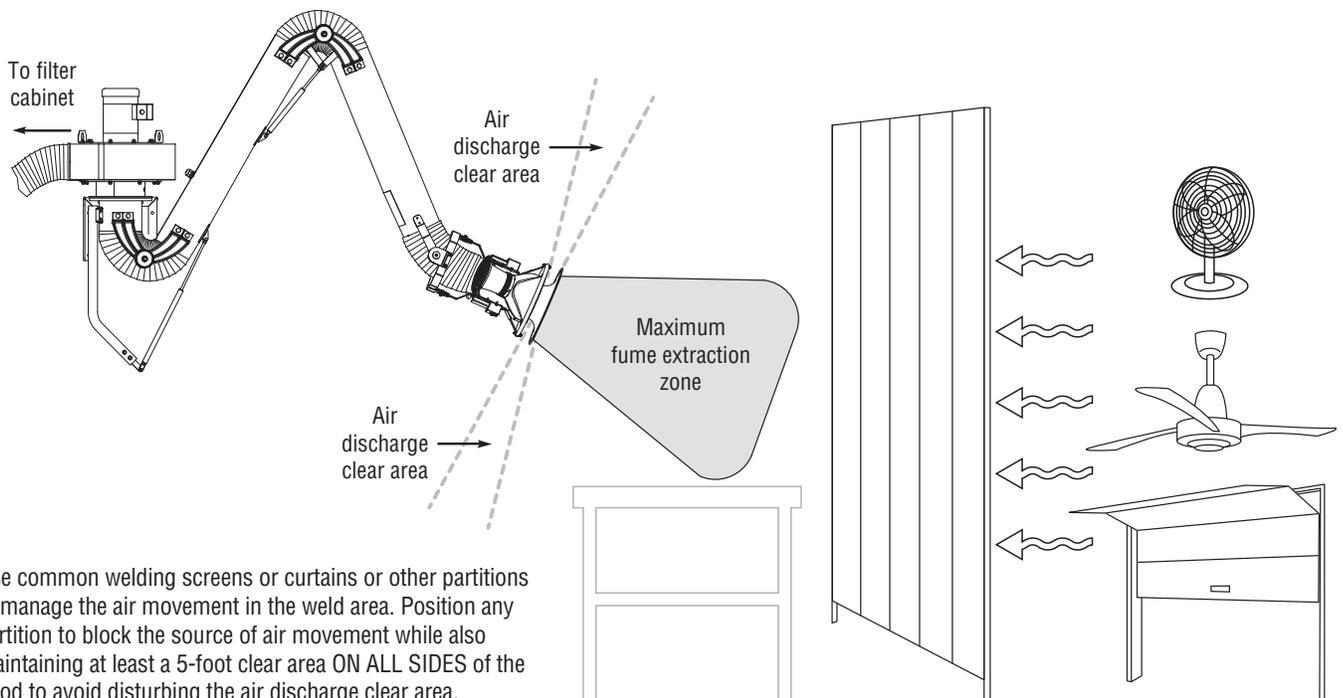
ZoneFlow technology is designed to operate most effectively in areas where air currents or turbulence are minimal.



The effectiveness, size and location of the fume extraction zone will be affected by air currents or turbulence in the work space. It is important to be aware of this and to manage the position of the zone by relocating the hood. Take advantage of any air-current patterns to move the fumes away from the operator and into the fume extraction zone.

## 4. Compensate for air currents using screens or curtains

For the most efficient fume extraction in some environments, it may be necessary to actively manage the air currents to establish more predictable and stationary air space.



Use common welding screens or curtains or other partitions to manage the air movement in the weld area. Position any partition to block the source of air movement while also maintaining at least a 5-foot clear area ON ALL SIDES of the hood to avoid disturbing the air discharge clear area.

## Genuine Miller® Accessories



### Extraction Arm Mounting Kit

**300952** 6 inch (152.4 mm)

**300771** 8 inch (203 mm)

Includes all required hardware to attach the arm to a wall or column.



### Fume Extraction Blower **300691**

High-performance fan generates 1,200 cfm and creates an Accu-Rated™ minimum of 875 cfm extraction at the hood to better capture weld fumes and provide a cleaner environment.



### SWX Hood Light with Arc Sensor

**300763** Field

The hood light with arc sensor illuminates the welding zone and enables the fume extractor to start automatically when welding begins.

## Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Telescoping Extraction Arms (Arm only)	<b>301242</b>	6 in. diameter, 3–4.5 ft. length		
	<b>301237</b>	8 in. diameter, 3–4.5 ft. length		
Standard Extraction Arms (Arm only)	<b>300953</b>	6 in. diameter, 7 ft. length		
	<b>300954</b>	6 in. diameter, 10 ft. length		
	<b>300955</b>	6 in. diameter, 12 ft. length		
	<b>300980</b>	8 in. diameter, 7 ft. length		
	<b>300981</b>	8 in. diameter, 10 ft. length		
	<b>300982</b>	8 in. diameter, 12 ft. length		
ZoneFlow™ Extraction Arms and Motor Control Box	<b>951810</b>	6 in. diameter, 10 ft. length		
	<b>951811</b>	6 in. diameter, 12 ft. length		
	<b>951758</b>	8 in. diameter, 10 ft. length		
	<b>951759</b>	8 in. diameter, 12 ft. length		
<b>Accessories</b>				
Extraction Arm Mounting Kit	<b>300952</b>	6 in. mounting bracket and hardware		
	<b>300771</b>	8 in. mounting bracket and hardware		
Fume Extraction Blower (Includes on/off control box and mounting bracket)	<b>300691</b>	1 horsepower		
SWX Hood Light with Arc Sensor	<b>300763</b>	Field. For use with SWX. Fume extraction blower required		

Date:

Total Quoted Price:

Call us toll-free at 866-931-9730 or email us at [filtair@millerwelds.com](mailto:filtair@millerwelds.com) for information and request-for-quotes on custom-engineered solutions to fit your needs.

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