

Walk-In Hoods



Many factories and production plants utilize large machinery for their manufacturing process. These machines may use *heat, cutting, blasting, mists, coolants, and routing* to create materials or finished goods. These processes emit particulate and odor into the air that not only pose respiratory hazards to workers, but can accumulate on floors and surfaces causing slip hazards. An economical way to contain these contaminants is to enclose the machines within a negative-pressure hood or **Walk-in Hood**.

Likewise, in certain applications the workpieces can be larger or cumbersome to work within small benchtop hoods and may not be practical to source capture through a standard fume extractor due to size. In these types of situations, the **Walk-in Hood** concept allows the operator to isolate the application in a larger chamber without having to expose the entire environment. These are ideal on manufacturing floors where a specific process is generating fumes or particulate and operators do not want to cross contaminate the other work areas. The concept of a **Walk-in Hood** also creates a mini “dirty-room” or sub-assembly room that is much cheaper, mobile, and easier to erect than a conventional room. The modularity of the **Walk-in Hoods** allows flexibility between ductless or ducted fume exhaust.

Walk-in Hoods utilize multiple air cleaners to draw in fumes and particulate away from the operator’s breathing zone into the filter then releases filtered air outside of the enclosed area. The type of filter utilized depends on the application. Our **Walk-in Hoods** are constructed of a heavy duty steel frame.

Each **Walk-in Hood** is custom designed to fit your application. A Sentry Air Systems specialist works with you to determine suitability and efficiency to create a conceptual drawing based on your specifications and configurations. After approval, lead time for walk-in hoods varies but typically takes 2-3 weeks after design approval.

Examples of Custom Modifications

- Custom sizes & dimensions
- Hood material & color
- Custom cutouts
- Blower configurations and mounting options

Typical Applications

- Plastic injection molding
- Vacuum plastic molding
- Lathes & Routers
- Solvent parts cleaning
- Chemical fumes
- Light grinding
- Welding fume extraction
- Acid gas fume control
- Packing
- Powder processing
- Particulate fume & particulate removal containment



Custom Heavy-Duty Steel Frame Walk-in Hood with Dual Model 400 Air Cleaners



Walk-in Hoods allow for big machinery to be completely enclosed in order to capture airborne particulate and fumes.

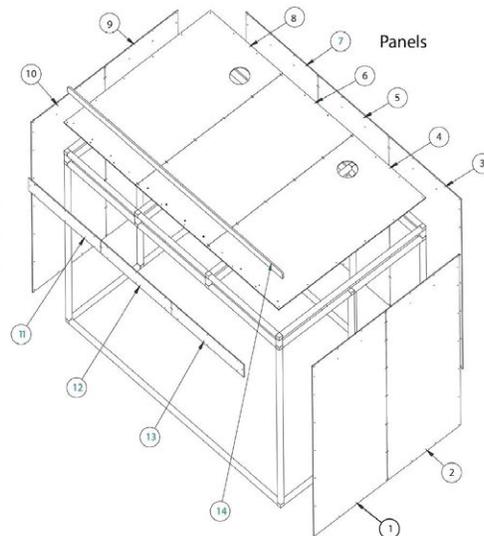
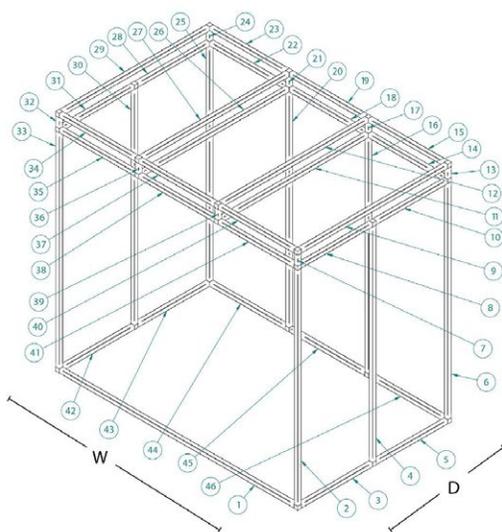


Applications such as grinding can be conducted under a Walk-in Hood.

Product Specifications



Heavy-Duty Steel Frame	
Material	3" x 3" Steel Structural Tubing Powder Coated; 1/4" Clear Acrylic Sides
Height	up to 9 feet
Width & Depth	up to 20 feet
Weight	Steel tubing: 3.29 lbs/ft Acrylic: 1.44 lbs/sq ft
Options	Floor Mounting Clear Anti-Static Vinyl Strip Curtains, Floor (HDPE) Multiple Filter Units Collars for Ductwork Available
Filter Unit Options	Model 300 (SS-300-MS): up to 350 CFM per unit Model 400 (SS-400-MS): up to 700 CFM per unit Model 450 (SS-450-MS): up to 900 CFM per unit
Main Filter Options	HEPA (up to 99.97% efficient on particles down to 0.3 microns) ASHRAE (up to 95% efficient on particles down to 0.5 microns) Activated Carbon Specialty-blended filter media (i.e. acid gas, mercury, aldehyde, and ammonia)
Warranty	Limited two-year warranty from date of shipment on defects due to materials or workmanship.
US Patent	#5,843,197/ #8,353,745



Examples of Walk-in Fume Hood Drawings