

Double-Entry Series

Fume Hood Installation Guide and User Manual



Attention! Important Safety and Operating Instructions.
Read and understand the manual in full before operation.

Installation

Unpack all materials and inspect for damage. File claims for freight damage within ICC regulations.

The following procedures must be taken before setting of fume hoods (while hood is still on the shipping skid):

1. Remove straps securing both sashes. Prop up sash 30" above skid – make sure sash is parallel to skid by propping on both left and right sides of sash.
2. Remove side panels and cut strap securing counterweights.



3. Attach sash cables to counterweight ensuring cable clips face toward the opposite counterweight (refer to photos):



Align cables over pulleys and pull tight, removing any twists. Feed both cables through attachment loop on top of counterweight and secure with 2 cable clamps. Each clamp secures both cables; clamps are about 1" apart. Repeat steps for second counterweight.

4. **Re-install side panels before checking sash operation.** Side panels must be installed for interlock system to function properly as interlock mechanism uses the side panel as a locating stop.
5. Check operation of the sash, making sure that counterweight is parallel to skid, sash moves freely. If binding occurs, check cable pulleys and that the hood is sitting square.
6. Cut off excess cable. Remove brackets securing hood to skid inside each side panel, discard brackets and replace screws securing sash guides.
7. The following procedures must be taken after the setting of the hood on the work surface:
 - Make sure sash operates without binding.
 - Secure hood to countertop with #8 x 1/2"-long, round head, stainless steel sheet metal screws.
8. Have wiring of hood light fixture done by qualified electrician.
9. Have duct work and blower system installed and connected by qualified mechanical technician.

Operation

1. Turn on interior light. (*Standard fume hoods come with LED bulbs installed.*)
2. Turn on exhaust fan. Verify exhaust system is operating properly and that air is flowing through the fume hood before starting fume-producing activities.
3. Set-ups and apparatus should be as far back from the sash opening as possible for safety and optimal performance. A set back of at least 6" is necessary for proper fume containment. Avoid blocking off baffle openings.
4. Large, bulky objects should not be placed directly on the work surface. Block up 2-3" to permit air flow under the object and into lower rear baffle exhaust opening.
5. Avoid rapid movement and excessive personnel passage in front of the hood. Air disturbances created may draw fumes out of hood.
6. Keep sash closed during operation and use a safety shield when inspecting or adjusting apparatus.
7. Limit quantities of hazardous materials inside fume hood to those required. Do not use hood for storage of toxic or flammable materials.
8. Stop all hazardous fume producing processes in the event of failure of the exhaust system or electrical power.
9. Do not place face or upper body inside fume hood when in operation.
10. Changing of baffle adjustment by unqualified personnel can be dangerous. Do not close off or block baffle openings.
11. Do not use perchloric acid or radioactive materials in standard fume hoods. Use hoods specially designed for these materials.
12. Do not permit temperature of inside of sash surface to exceed 160°F. unless the sash is equipped with tempered glass.
13. To maintain a safe work environment, the fume hood should always be operated with care by trained and qualified personnel.

****DISCLAIMER FOR DOUBLE ENTRY HOODS: DUE TO THE DESIGN CONSTRAINTS WITH DUAL OPPOSING SASHES – NECESSITATING A REDUCTION IN BAFFLING, AIRFLOW CONTROL AND PROPER FACE VELOCITY MAINTENANCE – THIS HOOD SHOULD NEVER BE OPERATED WITH BOTH SASHES OPEN.**

Maintenance

This unit has been designed to provide many years of service with minimal maintenance. Maintenance procedures consist primarily of clean-up, adjustment, lubrication, and replacement of worn, damaged or non-functioning parts.

Good housekeeping practices included cleaning sash (exterior and interior surfaces), fluorescent light glass panel, and periodic replacement of lamps to maintain adequate illumination.

1. Exterior metal surfaces should be cleaned with mild soap and water. Surfaces maybe then coated with a good furniture paste wax. Avoid excessive use of touch-up paint.
2. Interior surfaces should be periodically cleaned with a mild detergent to remove accumulated soil. Do not use an abrasive cleaner. Clean-up should be performed by, or under supervision of, a knowledgeable technician, and should include removal of the baffles for clean-up of all interior surfaces.
3. Sash guides should be lubricated with paraffin or petroleum jelly – used sparingly and only when necessary. Be sure to remove debris from sash guide area prior to applying lubricant.

Pulleys are self-lubricating, but should they require, lubricate with a light bearing grease.

Stainless steel sash frame is glazed with ¼" laminated safety glass and should not require replacement, unless cracked or broken. Due to fragility of glass in shipping, single replacement panes should be procured locally.

For additional information or guidance please contact us directly at 231-767-1301 or via email at sales@iq-laboratory.com.

Basic Wiring Diagram:

Typical fume hood wiring diagram showing light switch, blower (exhaust) switch, and two GFI receptacles.

