

CleanAir Floor-Mounted Series

Fume Hood Installation Guide and User Manual



<u>Attention!</u> Important Safety and Operating Instructions.

Read and understand the manual in full before operation.

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).



Ensure hood is being place on level surface. Un-level surface will cause sash binding fitup and hole alignment issues.

 Stand up left side panel. Clamp the back panel to the galvanized back angle of the side panel. Note – back panel fits to the inside of the galvanized angle.





- Stand-up right-side panel and clamp to back panel. Secure back panel to sides with provided ¼-20-1/2 screws and nuts.
- Note: back panels can be horizontal (as shown below) or vertical depending on hood width.

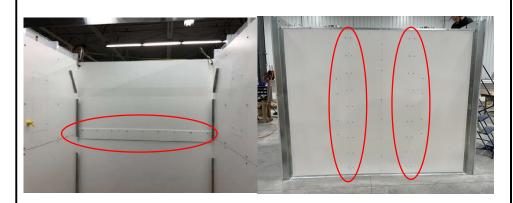


- Install inner-front with hardware included.
- Confirm you have the proper width dimension for your specific size hood before securing. Example: if you ordered a 8ft floor-mounted hood, you should have a outside dimension of 96" from side-panel to side-panel. Make sure you check the dimension at the top, middle and bottom of the hood.





 Attach upper back panel and secure in place using ¼-20 screws and nuts. The splice between the upper and lower back panels also needs to be secured using the ¼-20 screws with lock washers. Depending on hood style, this splice may be horizontal or vertical.



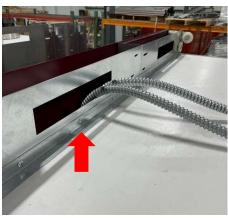
- Install hood top noting that depending on hood depth, you may have a twopiece or one-piece top.
- Before securing in place, make sure the hood is square by measuring diagonally from one rear corner to the opposite front corner and then repeating using the opposite corners of the hood. Both diagonal measurements should be within 1/16" of each other.
- Once square, secure the top in place using ¼-20 screws into the inner-front.





- Secure the rear of the top to the upper portion of the back panel using ¼-20 screws and nuts through the holes provided.
- Once the top is secured at the front and rear, use the top panel angles and selfdrilling screws provided to fasten the top panel angle to the galvanized superstructure.





- Hang upper, middle, and lower baffles on the interior of the hood.
- The hoods ship with baffle bracket angles pre-installed.
- ¼-20" stainless bolts and lock washers are provided for baffle installation.
- Depending on the size of the hood, your baffles may come with z-brackets and support angles which help stiffen the baffles towards the center.



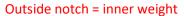
If your hood is larger than 8ft in width, you will have a baffle hangar tree. This will come pre-installed on the back panel and will give you the structure needed to hang both the left and right-hand baffles found in larger hoods.



- Sash weights can be dropped into both the front and rear tracks at the back of the hood.
- It is critical to ensure that the correct weights (inner vs. outer) are placed in their correct locations. If these are reversed, the sash cables will not align correctly.
- The weight with the notch furthest to the outside should be placed in the inner-most track (closest to the back panel) of the hood. The weight with the notch further toward the center should be placed in the outer track.

Note – some counterweights will have a "bow" or camber to them from the cutting process. It is important that the bow in both counterweights face the same direction to avoid them interfering with one another during operation.







Inside notch = outer weight

Sashes can be placed in their proper track at the front of the hood. Window boards should be used to prop up the sashes to easily connect them to their counterweights.

Once connected, ensure that the sashes ride smooth in their tracks and that there is no grinding noises coming from the counterweights.

If you notice there is binding with the sashes the following issues are common:

- Hood is not square
- Hood dimension across the front is too small or too large
- Sash tracks have debris

If noise is coming from the counterweights, ensure that you have installed the weights with the bow (if one exists) going the same direction and that the weight glides are connected to the ends of each counterweight. The glides prevent metal-onmetal contact between the weights and the tracks.



Once sashes are installed and operational the front panel can be installed using hardware provided.



WARNING! DO NOT STAND ON TOP PANEL OF FUME HOOD DURING OVERHEAD WORK. THE MATERIAL WILL NOT SUPPORT A PERSON'S WEIGHT AND FALLING THROUGH CAN CAUSE SEVERE INJURY.

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.

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.
- 4. Pulleys are self-lubricating, but should they require, lubricate with a light bearing grease.
- 5. Stainless steel sash frame is glazed with 1/4" 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 616-583-8876 or via email at sales@iq-laboratory.com.