Other HEMCO Products

UniFlow CE
AirStream

Made in the U.S.A.

UniFlow SE AireStream
High Performance
Energy Efficient
Laboratory Fume Hoods

UniFlow LE
AirStream

Safety Equipment

Installation, Operation, Maintenance Manual
UniFlow SE Dual Entry Fume Hood

Standard 12140, 12150, 12160, 12180, 12340, 12350, 12360, 12380
12240, 12250, 12260, 12280,
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## RECEIVING AND INSPECTING SHIPMENTS

Transportation companies are responsible for shipment from the time that it is received by them until it is delivered. All shipments leaving our plant have been carefully inspected and loaded on the carrier’s vehicle.

If a shipment arrives with the crating or packaging damaged, have the driver note the condition on the bill of lading and inspect the contents immediately for concealed damage. Due to the crate sizes and number of components HEMCO recommends that with any crate damage, even minor, that the bill of lading be signed for noting “crate damage…pending further inspection for concealed product damage”

If the equipment has been damaged in transit, immediately notify and file a claim with the carrier. Do not return to HEMCO. If this procedure is not followed, the carrier will reject the claim and the consignee will suffer the loss. Please notify HEMCO so that we may help you in anyway possible with evaluation, repair, replacement, and valuation of the damage that has occurred.
NOTES:

UNPACKING INSTRUCTIONS FOR SE DUAL ENTRY FUME HOOD

The HEMCO Fume Hoods are shipped palletized fully crated, padded and wrapped for maximum protection and ease of handling. If damaged call the adjuster for the delivering carrier promptly and notify HEMCO at 1-800-779-4362.

1. Upon receiving, inspect for crate damage and possible concealed damage that may have occurred in transit. Save all delivery receipts and crating materials. If damaged call the adjuster for the delivering carrier promptly and notify HEMCO at 1-800-779-4362.

2. When uncrating the hood remove the top section of the crate, which is stapled to the top of the side. Then carefully remove the front, two sides and the rear of the crate.

3. When ready to install Fume Hood, carefully lift from pallet and set on work surface in proper location (see Fume Hood Installation).

4. Remove accessory/sash weight box, which may be attached inside the Hood, on the skid or on the top of the hood.

CAUTION: DO NOT lift the hood by the airfoil.

PREPARATION FOR INSTALLATION

Preparation For Installation
Read the Complete Manual
Gather Required Tools/Equipment

Suggested Tool List
Floor anchor bolts or materials
Cordless screw driver/gun
Quick ratchet bar clamps

Required Tool and Material List
Caulking Gun
100% pure silicone caulk
#2 screwdriver
Assortment of open-end wrenches
Stepladders

Note: All images shown are for demonstration purposes only. However all images are similar in design.
1. Deliver components to the site.

2. Set the Left Side wall as close as possible to the desired final position of the hood.

3. Set the Right side wall.

4. Set the Ceiling panel between the Left and Right side walls. Note 2 X 4 boards can be used to temporarily hold the ceiling panel, until it is attached with sheet metal screws.

5. Secure from the top with provided #10 sheet metal screws.

6. Have a Licensed Electrician make the wiring connections into the junction box.

7. Feed the flexible conduit into hole in Right side.

8. Feed the flexible conduit into hole in Right side, and secure to top with conduit mounting brackets.

**INSTALLATION**

**TROUBLE SHOOTING**

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CAUSE</th>
<th>CORRECTIVE ACTION</th>
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<tr>
<td>Insufficient air flow</td>
<td>1) Improperly sized blower 2) Motor (impeller wheel) is running backwards 3) Obstruction in duct system 4) Leaks in duct system 5) Overloaded filters</td>
<td>1) Resize blower, change drive package 2) Correct wiring for reverse rotation of motor. 3) Locate and Remove obstruction 4) Trace and repair 5) Clean or replace filters</td>
</tr>
<tr>
<td>Fume Hood or Blower not operating</td>
<td>1) Blown fuse or open circuit breaker 2) Defective motor 3) Thermal protector on 4) Motor improperly wired</td>
<td>1) Replace fuse or reset circuit breaker 2) Consult factory 3) Check for high or low voltage input or ambient temperature over 40 degree C (104 degree F) 4) Correct wiring for reverse rotation of motor</td>
</tr>
<tr>
<td>Contaminates outside fume hood face</td>
<td>1) Improper use or procedures 2) External factors 3) Improper face velocity</td>
<td>1) Follow safety guidelines and procedures 2) Check external air flow patterns around fume hood 3) Recertify fume hood face velocity and/or duct system</td>
</tr>
<tr>
<td>Sash binding</td>
<td>4) Cable off of pulley 5) Replace Sash / Cable</td>
<td>5) Replace Sash / Cable</td>
</tr>
<tr>
<td>Air Flow Monitor</td>
<td>6) 7)</td>
<td>7)</td>
</tr>
<tr>
<td>Electrical Services not working</td>
<td>8) Circuit Breaker 9) Check Main Load Center 10) Corroded Contacts</td>
<td>9) Check Main Load Center 11) Clean or replace</td>
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SAFETY RECOMMENDATIONS

**DO** - AVOID UNNECESSARY EXPOSURE OF PERSONNEL TO FUMES INSIDE HOOD BY KEEPING SASH CLOSED EXCEPT WHEN LOADING OR UNLOADING HOOD.

**DO** - KEEP MATERIALS 6” OR MORE FROM FRONT EDGE OF SASH PLANE.

**DO** - KEEP THE SASH AT DESIGN OPENING WHILE UTILIZING THE FUME HOOD.

**DO** - CLEAN UP IMMEDIATELY ANY MAJOR SPILLS OCCURRING INSIDE HOOD.

**DO** - USE ONLY GROUNDED ELECTRIC EQUIPMENT.

**DO** - REPORT ANY MALFUNCTION OF THE EXHAUST SYSTEM.

**DO** - ELEVATE CONTAMINATES AND EQUIPMENT ABOVE WORKSURFACE OF HOOD ENABLING AIR FLOW BE NEATH AND AROUND.

**DO** - KEEP MOVEMENTS IN THE HOOD AND IN FRONT OF THE HOOD TO A MINIMUM.

**DO** - CHECK FUME HOOD FACE VELOCITY ON A REGULAR SCHEDULE.

**DO NOT** - USE HOOD UNLESS EXHAUST SYSTEM IS IN OPERATION.

**DO NOT** - CHANGE DAMPER OR BAFFLE SETTINGS AFTER INITIALLY SET.

**DO NOT** - USE FUME HOOD FOR STORAGE OF CORROSIVE OR VOLATILE MATERIALS.

**DO NOT** - BLOCK BAFFLE OR GRILL OPENINGS.

**DO NOT** - GENERATE LARGE QUANTITIES OF INFLAMMABLES WITHIN THE FUME HOOD.

**DO NOT** - PERMIT TEMPERATURES OF SASH GLASS TO EXCEED 160 DEGREES FAHRENHEIT.

**DO NOT** - PLACE UPPER BODY OR HEAD INSIDE THE FRONT PLANE OF THE HOOD OPENING.

**DO NOT** - OPEN OR CLOSE SASH SWIFTLY AS THIS MAY CAUSE ADVERSE AIR FLOW CURRENTS.

**DO NOT** - APPROACH OR LEAVE HOOD FACE SWIFTLY AS THIS MAY CAUSE ADVERSE AIR FLOW CURRENTS.

**DO NOT** - USE HOOD UNLESS EXHAUST SYSTEM IS IN OPERATION.

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**SAFETY RECOMMENDATIONS**

9. Position Front and Back baffles to bottom edge of Ceiling panel.

10. Secure with provided #10 sheet metal screws.

11. Position Front and Back Air foils.

12. Secure From Bottom with provided #10 sheet metal screws.

13. Install Front and Back Sashes from the top, into sash tracks on Left and Right Sides.

14. Sash cables are routed into the pulley system.

15. Cables are routed through side panel of hood.

16. Interior detail of sash routing.
**INSTALLATION**

17. Hang counter weights Left and Right side on loops at end of cables.

18. Install Access Panels over openings in left and right side walls.

19. Install Front and Back Lower Access Panels.

20. Secure from inside with provided #10 sheet metal screws.


22. Install Top Access Panels, Back Side.

23. Install light bulbs into Light sockets in ceiling.

23. Install Glass Globes into sockets in ceiling.

**FUME HOOD OPERATION**

**ELECTRICAL**

Electrical services supplied with your Hood are factory mounted but not wired. Wiring must be completed by a licensed electrician to comply with local codes. It is also suggested that the main junction box be grounded and that a quick disconnect in the power source be provided.

**PLUMBING**

All service fixtures requiring plumbing are normally installed on the Fume Hood ready for connection to the service outlets. Piping should be copper, however, stainless steel, black PVC or galvanized pipe may be used if required. A certified plumber should be used for all installation.

**CAUTION:** Be sure that plumbing lines do not interfere with movement of the sash weight(s).

**BLOWERS**

If your Fume Hood was ordered with an integral blower, it will be mounted on the hood. It will be necessary to wire it per local codes. Depending on the types of fumes being exhausted and the length of the duct work, rigid PVC, flexible neoprene, sheet metal or stainless ducting must be attached for fume removal.

**CAUTION:** The maximum length of run of ducting with integral blowers should be 15’ or less to minimize static pressure loss.

**GENERAL**

Remote mounted blowers and ducting requirements other than as specified are site specific and require a qualified engineer or installer.

**CLEAN UP**

Upon completion of the installation of your Hood it is a good idea to clean thoroughly to eliminate any miscellaneous debris and/or surface soil.

1. For all composite surfaces use a general-purpose nonabrasive household cleaner.
2. For glass surfaces use a formula glass cleaner. (Windex).
3. For the work surface it is recommended that you use soap and water.
4. For metal cabinet painted surfaces use a general purpose nonabrasive cleaner.

Any questions? Call HEMCO customer service at 1-816-796-2900.
1. Fume Hood must be set on the work surface or a flat level surface.

2. Once the Hood is in place, service lines can be connected (See Electric and Plumbing).

3. Service panels are provided to allow access for service hookup. Service panels can be taken off by removing plastic caps and attachment screws. Panels may be set aside for later replacement after the installation is complete. The front access panel above the sash is removable to allow access to the top of the Fume Hood (pull out or lower edges and push up to remove). The electrical junction box, light fixture, outlet collar for duct connection, special plumbing connections, and sash weight can be accessed from this position.

4. Fume Hoods are equipped with a tempered glass sash. Remove shipping tape alongside edges of sash and sash track. The sash counter balance weight(s) are packaged separately as noted in (Uncrating the Hood). The sash weight should be hung from the sash cable loops located on the left side within the double-wall construction. The sash cables should ride in the pulley groves to ensure smooth operation.

5. The fluorescent or incandescent light fixture is factory mounted.

6. A bead of white silicone sealant should be applied between the work surface and the Hood.

7. Reinstall front access panel and service panels.

8. Finally clean up with Formula Glass Cleaner.

**NOTE:** In those areas where seismic codes are a consideration, it is recommended that qualified engineers be consulted for necessary installation requirements for seismic codes.

24. Seal hood at the floor perimeter with silicone sealant.

25. General clean up of site, installation of any other equipment, etc.