

OPERATORS MANUAL

This manual provides
Installation & Operating instructions for



NOTIFY CARRIER OF DAMAGE AT ONCE.

It is the responsibility of the consignee to inspect the container upon receipt of same and to determine the possibility of any damage, including concealed damage. Avtec suggests that if you are suspicious of damage to make a notation on the delivery receipt. It will be the responsibility of the consignee to file a claim with the carrier. We recommend that you do so at once.

Information contained in this document is known to be current and accurate at the time of printing/creation. Unified Brands recommends referencing our product line websites, unifiedbrands.net, for the most updated product information and specifications.



1055 Mendell Davis Drive
Jackson, MS 39272
888-994-7636, fax 888-864-7636
avtecind.com

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SAFETY PROCEDURES

- Do not attempt to service this unit yourself as removing covers may cause unnecessary exposure to dangerous voltage.
- Never connect the unit to a power source while standing in water. Wet hands and wet floors should be avoided when connecting any electrical appliance to a power outlet.
- Fans may have multiple power connections. Make sure all fans are isolated from power prior to performing maintenance.

In addition, all Avtec food service equipment is backed by some of the best warranties in the foodservice industry and by our professional staff of service technicians.

Retain this manual for future reference.

NOTICE: Due to a continuous program of product improvement, Avtec reserves the right to make changes in design and specifications without prior notice.

NOTICE: Please read the entire manual carefully before installation. If certain recommended procedures are not followed, warranty claims will be denied.

MODEL NUMBER _____

SERIAL NUMBER _____

INSTALLATION DATE _____

Installation Instructions

INSTALLATION REQUIREMENTS FOR ALL AVTEC CHINOOK VENTILATION HOODS

Avtec CHINOOK ventilation hoods are provided with punched hanging brackets designed to receive 1/2" threaded rod with a 1/2" nut and washer. Supporting rods must be connected to all factory installed brackets. Recommended hanging height is 6'-6" above finished floor for canopies. Low side wall ventilators should be installed directly upon a Avtec base or on a fire rated wall. If wall mounted, the bottom of the vent side panel should be 3' above finished floor.

ALL AVTEC VENTILATION SYSTEMS MUST BE INSTALLED IN ACCORDANCE WITH NFPA-96, REMOVAL OF SMOKE AND GREASE LADEN VAPORS FROM COMMERCIAL COOKING EQUIPMENT.

CANOPIES

1. Check all local codes prior to installation. Special requirements may be necessary depending upon building material construction.
2. Move crated hood to location of installation and very carefully uncrate hood.
3. Raise hood to proper hanging height.
4. Suspend hood from adequate roof supports using 1/2" threaded rods with nuts and washers (See Fig. 1).
5. Level hood left to right and front to back.
6. Brackets are provided for hoods which are to be installed end to end or back to back. Bolt brackets together using 3/8" bolt through holes provided (See Fig. 2).
7. Install C channel where the ends of the hood meet and install T moldings on front face of hoods where they join. High temperature silicone can be used to install channel and T moldings (See Fig. 3).
8. For make-up air hoods, the supply collar with built-in UL listed fire damper and air volume damper must be installed per instructions on collar.
9. Provide a removable service door in supply duct near fire damper (See Fig. 5).

Figure 1

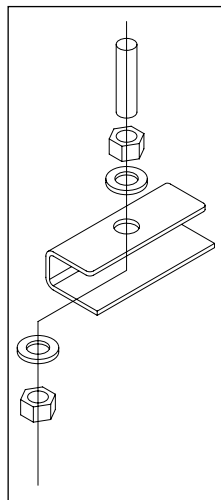


Figure 2

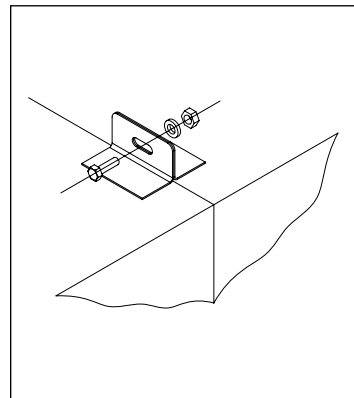
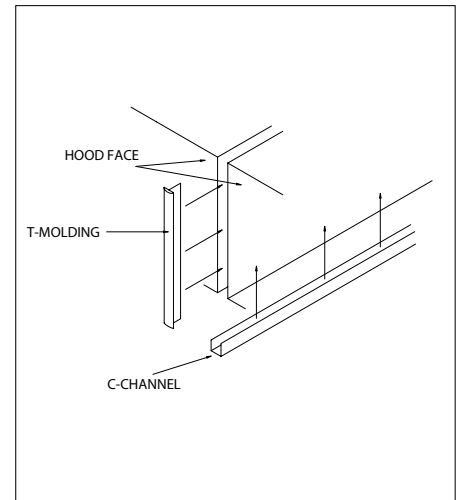


Figure 3



Installation Instructions

LOW SIDE WALL VENTILATORS

1. Check all local codes prior to installation. Special requirements may be necessary depending upon building material construction.
2. Move crated hood to location of installation and very carefully uncrate vent.
3. If vent is base mounted, base must be installed and leveled front to back and left to right.
4. Place vent on base. Secure vent to base by screwing side walls of vent to base (See Fig. 4).
5. If vent is wall mounted, place vent on wall, level front to back and left to right, then bolt metal hanging bracket located on top of hood to wall (See Fig. 5).
6. Bottom of ventilator should be 36" above finished floor (See Fig. 4).
7. Fluid weld exhaust duct to hood exhaust duct collar (See Fig. 5).
8. For make-up air ventilators, the supply collar with built-in UL listed fire damper and air volume damper must be installed per instructions on collar.
9. Attach air supply duct work to supply collar. **DO NOT SCREW INTO FIRE DAMPER.**

PIZZA OVEN HOODS DECK OVEN INSTALLATION (MODEL VPO)

1. Check all local codes prior to installation. Special requirements may be necessary depending upon building material construction.
2. Move crated hood to location of installation and very carefully uncrate vent.
3. Place hood directly on top of pizza oven.

CONVEYOR PIZZA OVEN INSTALLATION (MODEL VCP)

1. Check all local codes prior to installation. Special requirements may be necessary depending upon building material construction.
2. Move crated hood to location of installation and very carefully uncrate vent.
3. Suspend hood from adequate roof supports using 1/2" threaded rods and nuts, and washers (See Fig.1).
4. Hood should be hung no more than 1/2" above top of oven.
5. Install exhaust duct from hood exhaust collar to exhaust fan and curb.

Figure 4

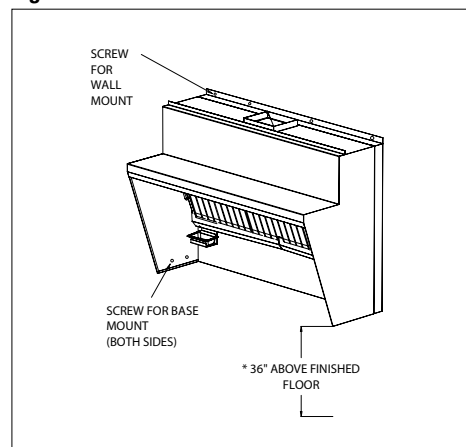
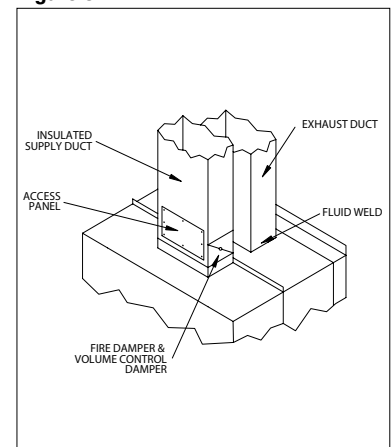


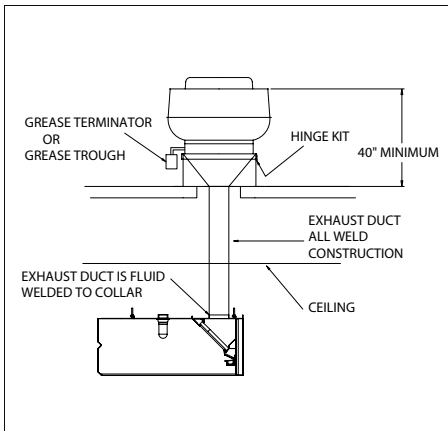
Figure 5



Installation Instructions

EXHAUST FAN & DUCT (See Fig. 6)

Figure 6

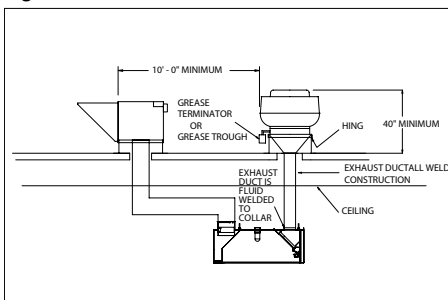


1. Check all local codes prior to installation.
2. All exhaust fans are supplied with a hinge kit, grease box and disconnect switch.
3. The exhaust fan curb should be installed directly above the hood if possible. Always maintain the shortest duct run possible.
4. Cut hole and seal exhaust fan curb to roof.
5. Place exhaust fan on curb.
6. Install hinges and airline cable on exhaust fan cap and metal curb. Remember to leave ample room for fan to tilt back. Fan will remain in tilted back position.
7. Install grease collection box on side of fan that has grease tube discharge.
8. The exhaust duct must be constructed of 16 gauge carbon steel or 18 gauge stainless steel. All seams must be fluid welded.
9. A duct transition should be provided below the exhaust fan inlet.
10. The exhaust duct must be fluid welded to hood collar.
11. Make all necessary electrical connections and check fan for proper rotation.

NOTE: Fan will exhaust air running in wrong direction.

FRESH AIR SUPPLY FAN (See Fig. 7)

Figure 7



1. Check all local codes prior to installation.
2. Supply fan inlet must be located a minimum 10' from the exhaust fan. If 10" is not possible a 3' vertical separation **may*** be acceptable.
3. Cut and seal supply fan curb to roof.
4. Duct shall be constructed of 22 or 24 gauge steel. Insulated duct material should be used to eliminate frost and/or condensation.
5. Duct shall be sized to provide air velocities not exceeding 1200 FPM.
6. A volume control damper, provided in the duct just above the supply collar that contains the UL listed fire damper, should be properly set to supply CFM required.
7. If the hood is provided without the supply collar installed, it must be installed per the instructions provided on the collar.
8. Carefully place the supply fan on roof curb. Face supply fan inlet away from prevailing winter wind. Electrical back draft damper is recommended in cold climates.
9. Bolt or screw fan to fan curb.
10. Make all necessary electrical connections and check fan for proper rotation

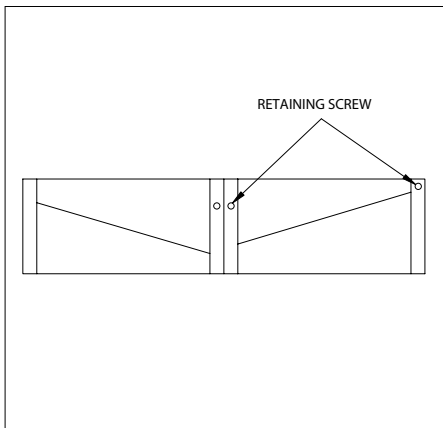
NOTE: Fan will supply air running in wrong direction.

***Dependent on local code requirements.**

Installation Instructions

HOOD WITH AIR VOLUME CONTROLLERS (See Fig. 8)

Figure 8



Some Avtec canopy hoods will be designed without patented Air Volume Controllers (AVC) located directly behind the standard filter bank. The AVC is specially designed to exhaust high volumes of air over high heat - high grease producing equipment thereby reducing the total exhaust volume.

The AVCs were factory set, based on the cooking equipment specified on the approved drawings, therefore the AVC will not have to be adjusted. AVCs can be removed for hood cleaning also. If, however, the cooking equipment has changed or should change in the future, the following procedure should be followed.

AVC ADJUSTMENT INSTRUCTIONS

1. Remove all grease filters from the hood.
2. Loosen retaining screws on channels holding the AVC at each end.
3. Slide AVC up or down as needed. The higher the AVC is moved the greater will be the exhaust volume.
4. Reset the retaining screw at the desired position.
5. Replace grease filters.

INSTALLATION OF SIDE SKIRTS pieces provided (See Fig. 9-11 on page 8)

One or two optional side skirts may be provided

INSTALLATION

1. Side skirts are offset at the top and have a 90° bend inward at the rear.
2. Skirts are to overlap the outside of the hood. Bolts and acorn nuts should be attached per the drawing (stainless bolts and acorn nuts supplied).
3. Skirt flange should be screwed to the wall (screws not provided).

TOP ENCLOSURES

INSTALLATION OF ENCLOSURE PANELS pieces provided (See Fig. 9-11 on page 8)

Enclosure panels are provided for exposed side(s) of hood(s)

INSTALLATION INSTRUCTIONS

1. Hoods ordered with enclosure panels will be shipped with threaded metal studs installed on perimeter of hood top where panels are to be installed. Retaining nuts and washers are installed on the studs prior to shipping.
2. Loosen nuts on studs. Slide enclosure panel under loosened nuts. Holes in panels are open on end so nuts do not have to be removed.
3. If enclosure panels are installed on one or more hoods butted end to end, the butting ends of the front enclosure panels should be bolted together.

Installation Instructions

INSTALLATION OF INSULATED STAINLESS STEEL WALL PANEL pieces provided

- A. Top panel will have a 1" flange full length top and bottom, and interlocking slots located on the bottom.
- B. Bottom panel will have interlocking tabs on top and full length 1" flange on bottom.

INSTALLATION INSTRUCTIONS FOR INSULATED WALL PANEL (See Fig. 12)

1. Install wall panels prior to hanging hood(s).
2. Install top panel first at 6'-6" A.F.F. and level. Screw panel to wall making sure slotted holes are facing floor.
3. Install lower panel by sliding tabs into slotted holes in upper panel, screw bottom flange to wall.
4. Caulk horizontal seam with NSF approved silicone sealant.
5. When hood is hung it will rest on top panel.

NOTE: Be careful not to damage wall panel face when installing hood.

INSTALLATION INSTRUCTIONS FOR SINGLE THICKNESS WALL PANEL (See Fig. 13)

1. Install wall panels prior to hanging hood(s).
2. Install seam strips at proper locations and screw to wall.
3. Apply glue to wall between seam strips.
4. Slip end of wall panel into seam strip, pull out middle of panel and slip other end of panel into other seam strip. Gently apply pressure over entire wall panel to secure to wall. Wall bands for side walls are provide with 1" return bend, which is to be located behind rear wall panels.

Figure 9

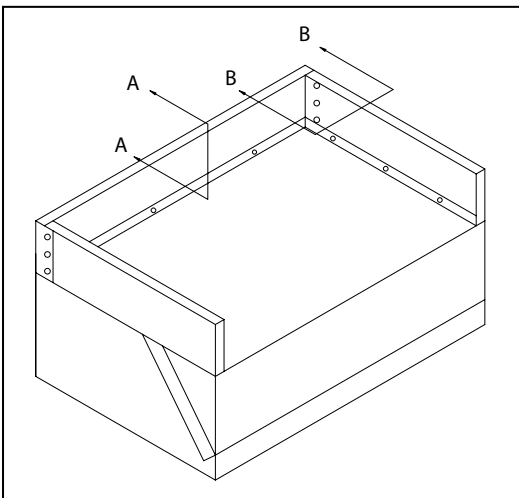


Figure 10

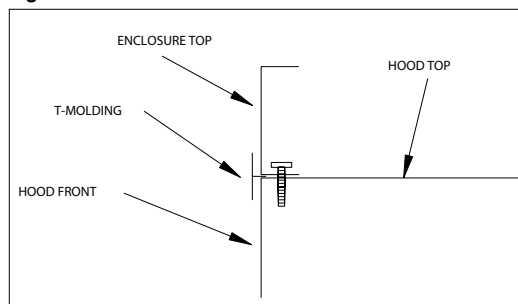


Figure 12

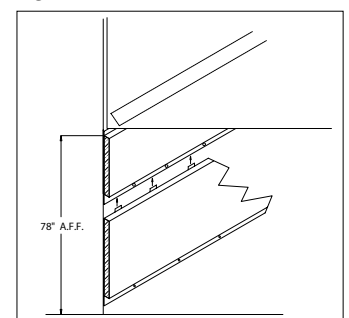


Figure 11

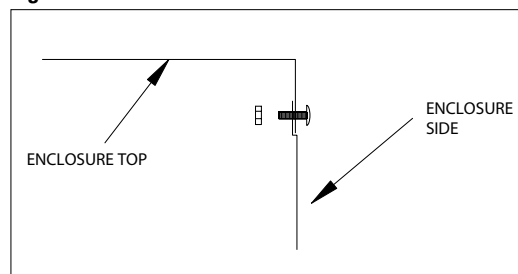
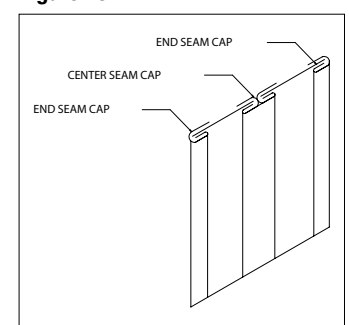


Figure 13



Start / Check / Balance

DIRECT DRAW HOODS

1. Close all doors and windows.
2. Operate all exhaust fans, even fans serving other hoods, make-up air units and building HVAC.
3. Turn on all cooking equipment under the hood to preheat to operating temperature.
4. Produce large quantities of smoke.
5. Observe capture of vapors.
6. If all vapors are not captured, increase exhaust fan RPM.
7. Check air pressure in kitchen. Pressure must be negative relative to dining room pressure.
8. Air velocities entering the kitchen from the dining room should not exceed 100 FPM. No air should be moving toward the dining area.
9. Repeat steps 6 and 7 until all vapors are captured.
10. Same as step 7 with bottom of next page.

NOTE: The exhaust and supply (if any) air flow rates were established under controlled laboratory conditions, and greater exhaust and/or lesser supply air may be required for complete vapor and smoke removal in specific installations.

MAKE-UP AIR HOODS Exhaust Fan(s)

1. Open all doors and/or windows leading to outside.
2. Start the exhaust fan only. Do not run the supply fan or make-up unit.
3. Refer to drawings and/or UL information label on hood for proper CFM requirements.
4. Adjust speed of exhaust fan to obtain proper air velocities and CFM through grease filters.

SUPPLY FAN OR MAKE-UP AIR UNIT

1. Start the supply fan and/or make-up air unit only. Do not run the exhaust fan.
2. Refer to drawings or UL information label on hood for proper CFM requirements.

Final Air Balance

MAKE-UP AIR HOODS

1. Close all doors and windows.
2. Operate all exhaust fans even those serving other hoods, supply fans, make-up air unit and building HVAC system.
3. Turn on all cooking equipment under the hood and preheat to operating temperature.
4. Produce large quantities of smoke or steam.
5. Observe capture of vapors.
6. If all vapors are not totally captured, fine tune the system by adjusting the air volume control damper installed in the supply collar. Slightly reduce the amount of supply air directed under the hood until full capture is obtained.

NOTES AND WORKSHEET



1055 Mendell Davis Drive • Jackson MS 39272
888-994-7636 • 601-372-3903 • Fax 888-864-7636
avtecind.com