

# Installation Manual

## Commercial Kitchen Vent Hood



Upon delivery please inspect the unit(s) for interior and exterior damage. Check that all accessories are accounted for and are undamaged. All damages must be reported to the carrier by the receiver immediately.

This unit should only be installed by a qualified professional. Please read through this installation manual completely before attempting any installation or service.

This installation manual shall be left with the owner once installation is complete for future reference and service.



C US  
FILE#:MH48178

**MODEL: JRSVH SERIES**

JEAN'S RESTAURANT SUPPLY  
426 SOUTH STAPLES  
CORPUS CHRISTI, TEXAS 78401  
PH: (361)884-9800  
WWW.JEANSRESTAURANTSUPPLY.COM

LIGHT FIXTURES: EACH LIGHT FIXTURE SHALL BE MODEL 1801, KASON, ULC 100W, TYPE A 0.9A 110V 60HZ FOR ELECTRICAL WIRING USE 14 GAUGE COPPER WITH 15A FUSE

GREASE FILTERS: HOOD SHALL COME FURNISHED WITH UL LISTED GALVANIZED, BAFFLE TYPE "KASON TRAPPER" GREASE FILTERS.

REPLACEMENT FILTERS: UL CLASSIFIED GREASE FILTERS OF THE SAME MODEL AND MANUFACTURER.

REPLACEMENT FILTERS CAN BE PURCHASED FROM :  
WWW.JEANSRESTAURANTSUPPLY.COM  
PH: (361)884-9800

HOOD SHALL BE INSTALLED MIN. 18" AWAY FROM ANY COMBUSTIBLE MATERIALS

MINIMUM EXHAUST AIR FLOW: 296 CFM/FT  
(27.53 M<sup>3</sup>/MIN/METER)

VENT HOOD LENGTH	A	X	Y	FILTER	QTY	LIGHTS	MAX HEAT	CFM/FT
4'	24"	8"	16"	16X16	3	1	400°F	300
5'	30"	8"	18"	16X20	3	1	400°F	300
6'	36"	8"	21.5"	16X16	2	2	400°F	300
				16X20	2			
7'	42"	8"	25"	16X16	4	2	400°F	300
				16X20	1			
8'	48"	10"	23"	16X16	6	2	400°F	300
9'	54"	10"	26"	16X16	3	2	400°F	300
				16X20	3			
10'	60"	10.5"	26"	16X20	6	3	400°F	300

UL Standard for Safety for Exhaust Hoods for Commercial Cooking Equipment  
UL 710 Sixth Edition, Dated September 13, 2012

CAN/ULC S646-10 (C-UL Listed) standard for Exhaust Hood and Related Controls  
for Commercial and Institutional Cooking Equipment Third Edition, July 2010

TYPE OF EQUIPMENT: FLAT TOP GRIDDLE  
SUITABLE FOR USE WITH COOKING APPLIANCE TEMP.

MAX: 400 DEG F (205 DEG C)

FRONT OVERHANG: 18"

SIDE OVERHANG: LEFT SIDE-6.5" RIGHT SIDE-10.5"

COOKING SURFACE TO LOWER EDGE OF HOOD: 42"

COOKING SURFACE TO FILTERS: 48"

REAR DISTANCE FROM COOKING SURFACE: 14.5"

NOTES:

- HOOD IS CONSTRUCTED OF 18 GAUGE STAINLESS STEEL
- ALL JOINTS ARE SEAMLESS, LIQUID TIGHT WELDS
- BAFFLE FILTERS ARE UL LISTED
- LIGHT FIXTURES ARE UL LISTED

HOOD - 18 GAUGE STAINLESS STEEL:

.0625MM THICK  
 EXHAUST COLLAR SHALL BE PROVIDED AND INSTALLED BY OTHERS. THE FOLLOWING SIZES SHOULD BE USED: 3" TALL, .0375MM THICK. LENGTH AND WIDTH DEPEND ON SIZE OF HOOD AND EXHAUST CFM REQUIREMENTS. REFER TO TABLE FOR SIZING REQUIREMENTS. EXHAUST COLLARS ARE FIELD INSTALLED ON THE VENT HOOD BY OTHERS.

GREASE FILTERS: KASON INDUSTRIES, KASON TRAPPER, GALVANIZED STEEL, UL LISTED 6L03  
 LIGHT FIXTURES: KASON INDUSTRIES, MODEL 2801, NSF, UL LISTED, INCANDESCENT LUMINAIRE ISSUE NO. A-242,527  
 NO SWITCHES ARE INSTALLED  
 HOOD SHALL COME FURNISHED WITH 1/2" PINT GREASE COLLECTOR CUP

HOOD FILTER ANGLE IS 48°

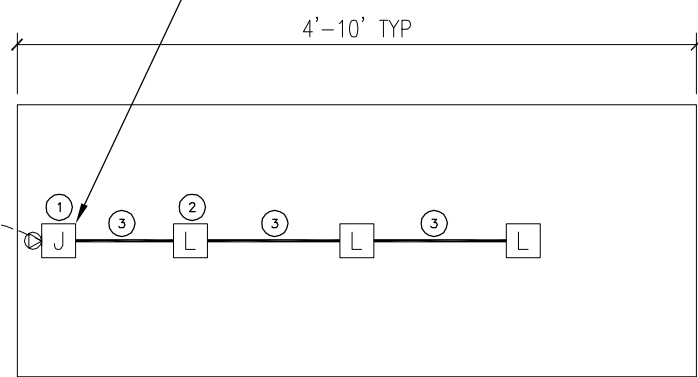
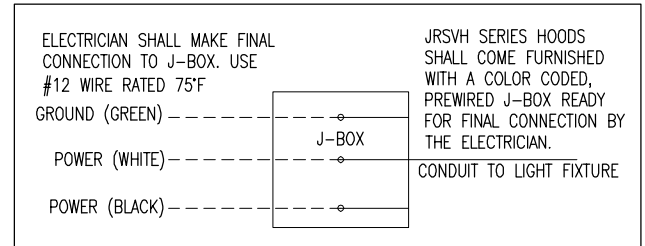
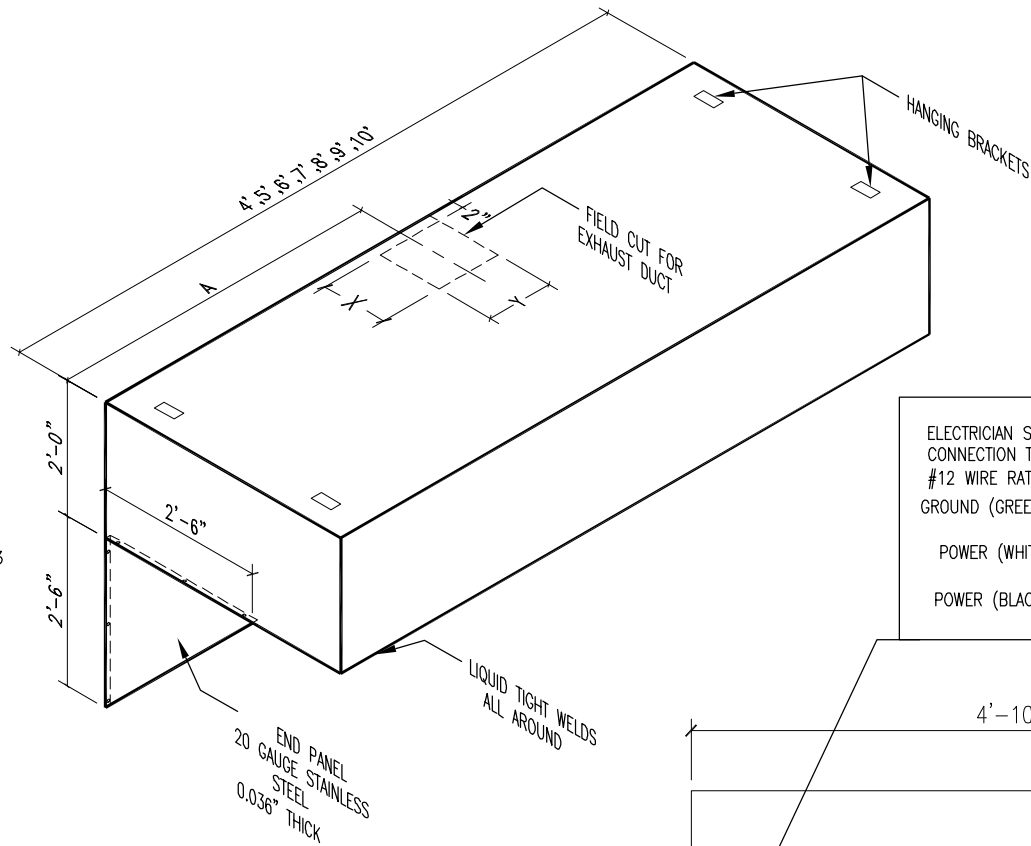
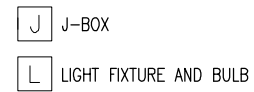


TABLE 1.0

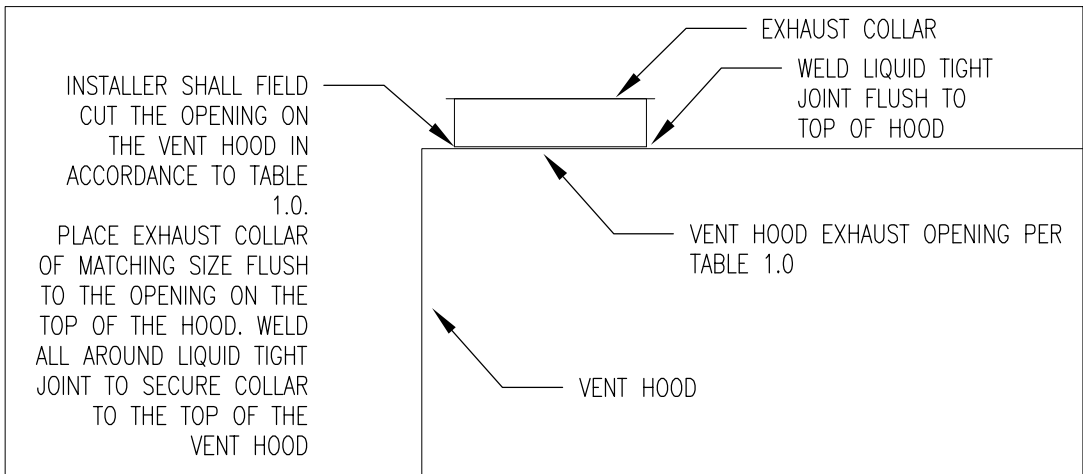
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- ① JUNCTION BOX PRE INSTALLED ONTO VENT HOOD USING TACK WELD. HOOD COMES PREWIRED WITH (3) #12 GAUGE UP TO JUNCTION BOXES. ELECTRICIAN SHALL MAKE FINAL CONNECTIONS TO THE J BOX
- ② HOOD SHALL COME WITH VAPOR PROOF INCANDESCENT LIGHT FIXTURES PRE WIRED TO THE J-BOX:  
 1 LIGHT FIXTURE FOR 4FT THRU 6FT  
 2 LIGHT FIXTURES FOR 7FT THRU 9FT  
 3 LIGHT FIXTURES FOR 10FT
- ③ PREWIRED RIGID ELECTRICAL CHASE.

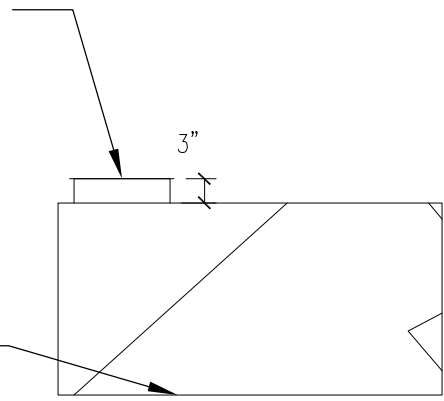


TYPE 1 VENT HOOD 4'-10'  
 NTS

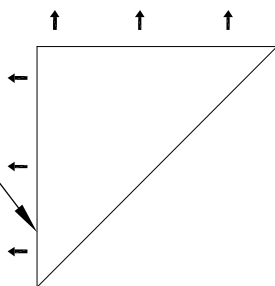
ELECTRICAL 1-LINE DIAGRAM



EXHAUST COLLAR SHALL BE FURNISHED AND INSTALLED BY OTHERS. MUST BE WELDED LIQUID TIGHT WELD JOINT ALL THE WAY AROUND. REFER TO EXHAUST DUCT OPENING TABLE FOR LENGTH AND WIDTH.



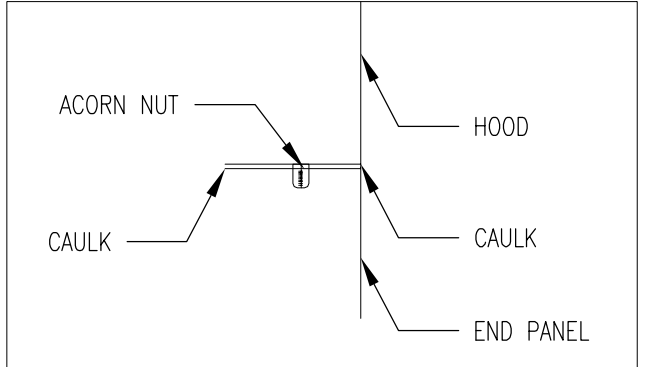
CAULK ANY SEAMS BETWEEN END PANEL AND VENT HOOD AND BACK WALL AFTER ATTACHING WITH THE ACORN NUT SCREWS PROVIDED (3).



SECURE THE END PANEL'S REAR FLANGE TO THE WALL USING ONLY STEEL SHEET METAL SCREWS USING THE PROVIDED HOLES (3) PANEL MUST BE PLACED STRAIGHT VERTICALLY.

END-PANEL INSTALLATION:

- 1) UNPACK THE END PANELS FROM THE SHIPPING CONTAINER. REMOVE THE PROVIDED ACORN SCREWS FOR MOUNTING THE TOP FLANGE. SHEET METAL SCREWS FOR SECURING TO THE BACK WALL OR S/S BACK SPLASH IS PROVIDED AND INSTALLED BY OTHERS.
- 2) END PANELS ARE TO BE INSTALLED ONCE THE HOOD IS MOUNTED ON THE WALL AND IN FINAL POSITION.
- 3) PLACE THE END PANEL WITH THE TOP FLANGE DIRECTLY UNDERNEATH THE HOODS BOTTOM FLANGE AND KEEP FLUSH TO THE BACK WALL.
- 4) ATTACH THE END PANEL TOP FLANGE TO THE HOODS BOTTOM FLANGE USING THE PROVIDED ACORN NUTS.
- 5) ATTACH THE BACK OF THE END PANEL TO THE BACK WALL USING SHEET METAL SCREWS (PROVIDED BY OTHERS) ENSURING THAT THE PANEL IS STRAIGHT VERTICALLY
- 6) CAULK ALL SEAMS WHERE THE END PANEL HAS MADE CONTACT WITH THE HOOD AND BACK WALL.



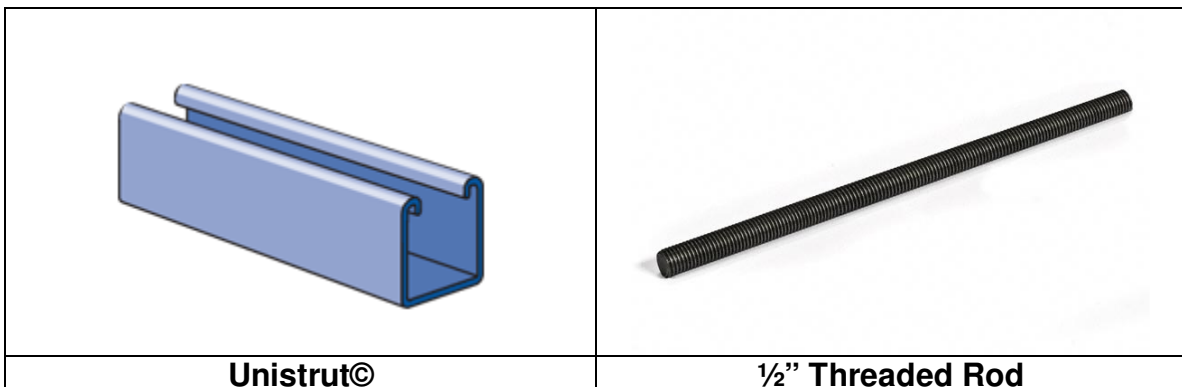
END PANEL /EXHAUST COLLAR INSTALLATION  
NTS

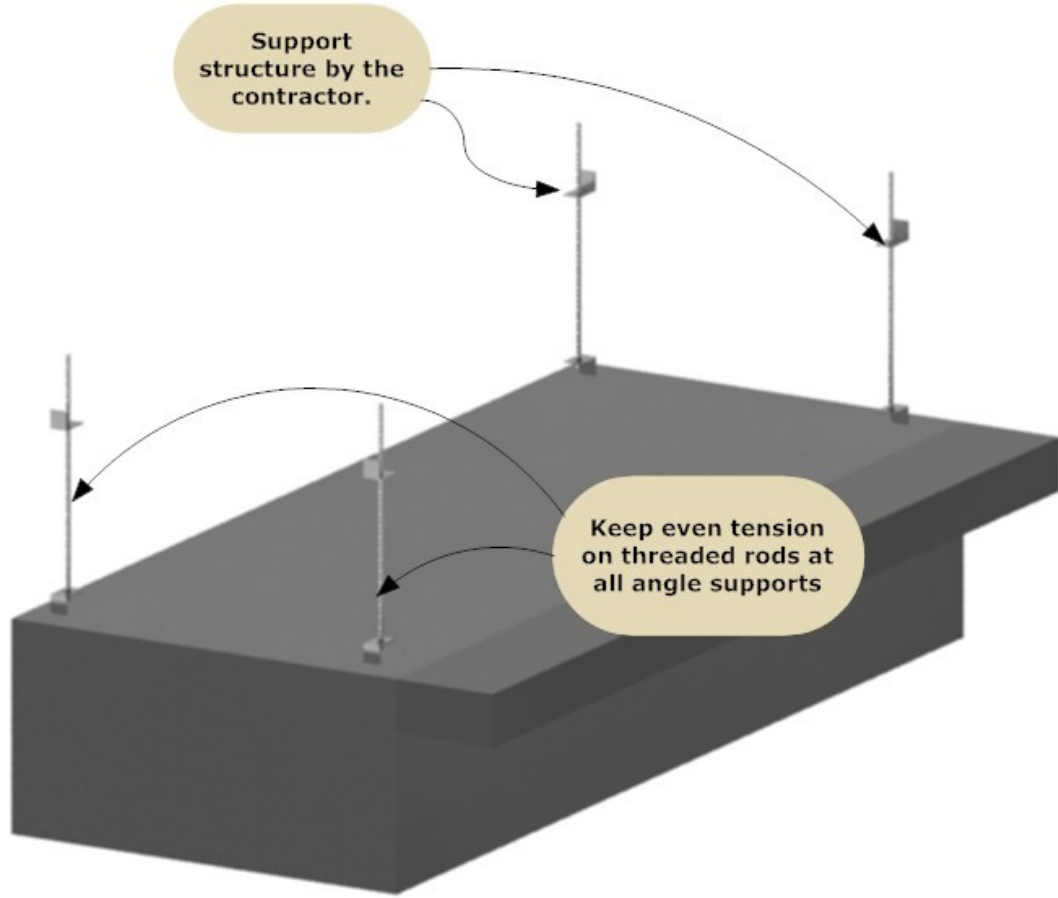
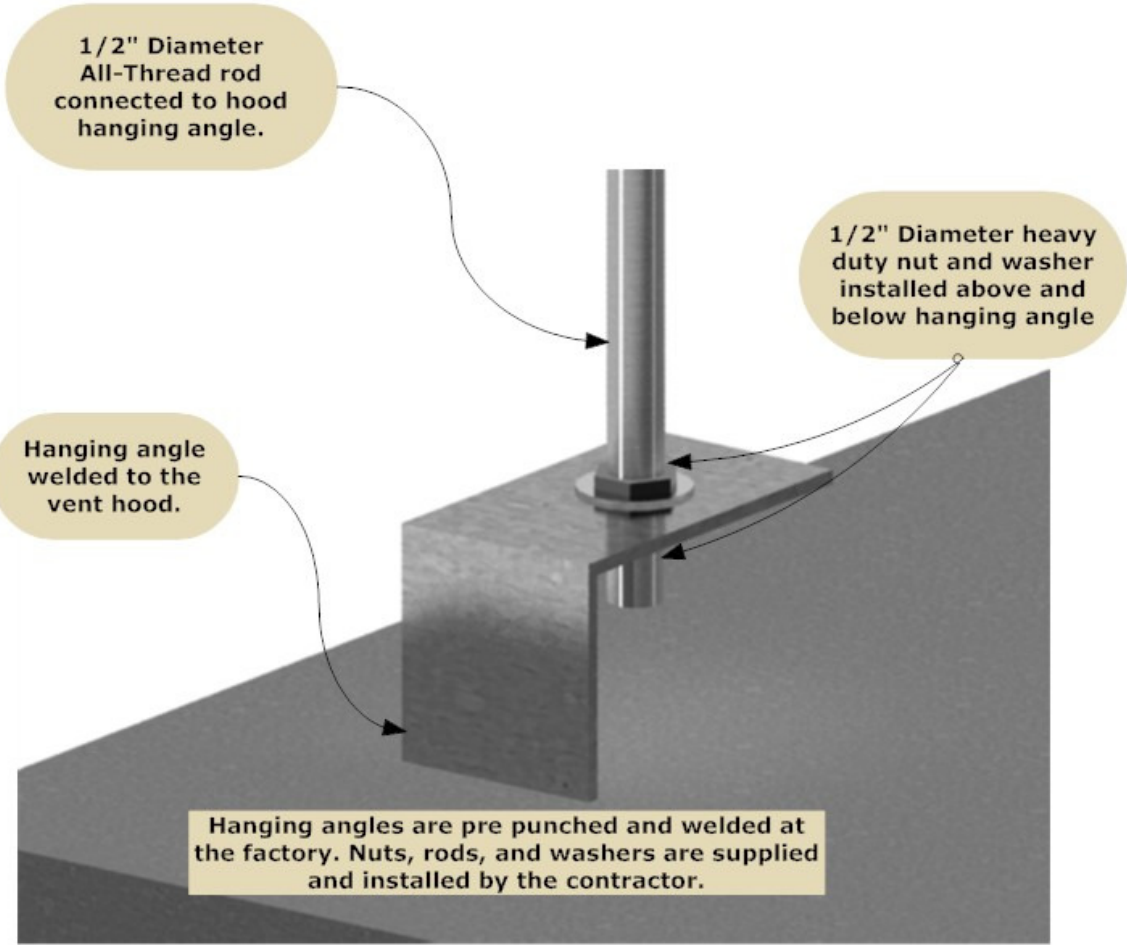
## Preparing the Site

- 1) Make sure the area where the vent hood will be installed is clear and free of loose debris that could be hazardous while lifting or moving the unit.
- 2) Always review the projects plans and specification before commencing the installation.
- 3) The vent hood should be placed in an area close to the space it will serve to reduce the amount of turns and twists in the duct work.
- 4) Confirm that all angles, beams, and rafters are structurally adequate to support the weight of the vent hood and its components. It may be necessary to strengthen the structural elements prior to installation. Additional support structures may be required from the suspended ceiling joists to align the hood in the required location.
- 5) Verify that the vent hood and duct work have adequate clearance from combustible materials. Refer to the IMC, NFPA96 and your local building/mechanical code ordinance for required clearances. Typical clearance for type 1 vent hoods is 18" between the vent hood, exhaust duct(s) and any combustible building materials.
- 6) Verify that the vent hood can enter the building! Make sure that you have adequate door clearance and that you can make any turns necessary to move the hood to its final position. If necessary, coordinate with the general contractor to move the hood into place prior to the placement of permanent walls or structures that could potentially obstruct its path.

## Installation

- 1) Remove all shipping materials from the vent hood and its components. Do not scratch or dent the vent hood while uncrating.
- 2) Verify the height of the vent hood installation. The bottom of the vent hood will be installed at **6'6"** above the finish floor.
- 3) Place the hood on the floor as close as possible to its final installed position. The exhaust collars and supply collars (if applicable) should be placed directly under the corresponding roof penetrations. A plumb-bob or laser pointer may be used to finalize its location. Remember to protect the hood from physical damage if it is resting on jacks
- 4) Weld the exhaust ducts to the hood before raising it up if at all possible. Use  $\frac{1}{2}$ " threaded rods to hang the vent hood. Drill  $\frac{9}{16}$ " holes in the structural support system. You can also use Unistrut to line up with the angle mounting brackets welded on to the hood. *The integrity and adequacy of the structural supports and support systems is the sole responsibility of the contractor and the structural engineer.*





- 5) Carefully raise the vent hood into position using equipment jacks, hydrologic lifts or high lifts at each end to keep the hood level.
- 6) Once the vent hood is in position at the proper height install the ½” threaded rod between each mounting bracket on the hood and the structural support system.
- 7) Use heavy duty nuts and fender washers above and below the vent hood hanging angles.
- 8) Make final adjustments with the ½” threaded rods to ensure that the hood is level on each end. Tension must be maintained evenly on all rods to distribute the weight of the hood evenly.
- 9) If standing or working on top of the hood is required, use pieces of plywood to evenly distribute the weight and to avoid damage.
- 10) Brace the vent hood to the ceiling joists and wall(s) in a manner that prevents the vent hood from moving. The hood must be secured in a manner that is accepted the authority having jurisdiction.
- 11) If the hood has a perforated supply plenum you may install it now. See Installation of Perforated Supply Plenum
- 12) Install the exhaust duct work. All exhaust duct used in the installation of the vent hood must be continuously welded and liquid tight. You may also use listed factory built grease ducts. The exhaust duct is welded to the hood exhaust collar and the fan curb flashing is welded to the exhaust duct. Refer to the *Ductwork Installation Guidelines* in this manual.
- 13) Install the supply ductwork if applicable. Do not use flexible duct for supply air connections. Refer to the *Make-Up Air Supply Duct Installation Guidelines* in this manual.
- 14) Run caulking along where the lower edge of the vent hood meets the wall.
- 15) Install the light bulb, light globes, and grease filters onto the vent hood.
- 16) Install the stainless steel grease cups in the designated slot.
- 17) It is recommended to leave the protective stainless steel plastic on the vent hood until all construction is completed to avoid any damages.
- 18) Use a stainless steel cleaner to wipe off any dust or residue that may have collected on the unit during delivery.
- 19) The exhaust air flow rates were established under controlled laboratory conditions. Greater exhaust air is required for complete vapor and smoke removal in specific installations.
- 20) Installation shall be in accordance with ULC-S650, Standard for the installation and Performance of Ventilation and Fire Suppression Systems for Commercial and Institutional Cooking Equipment.

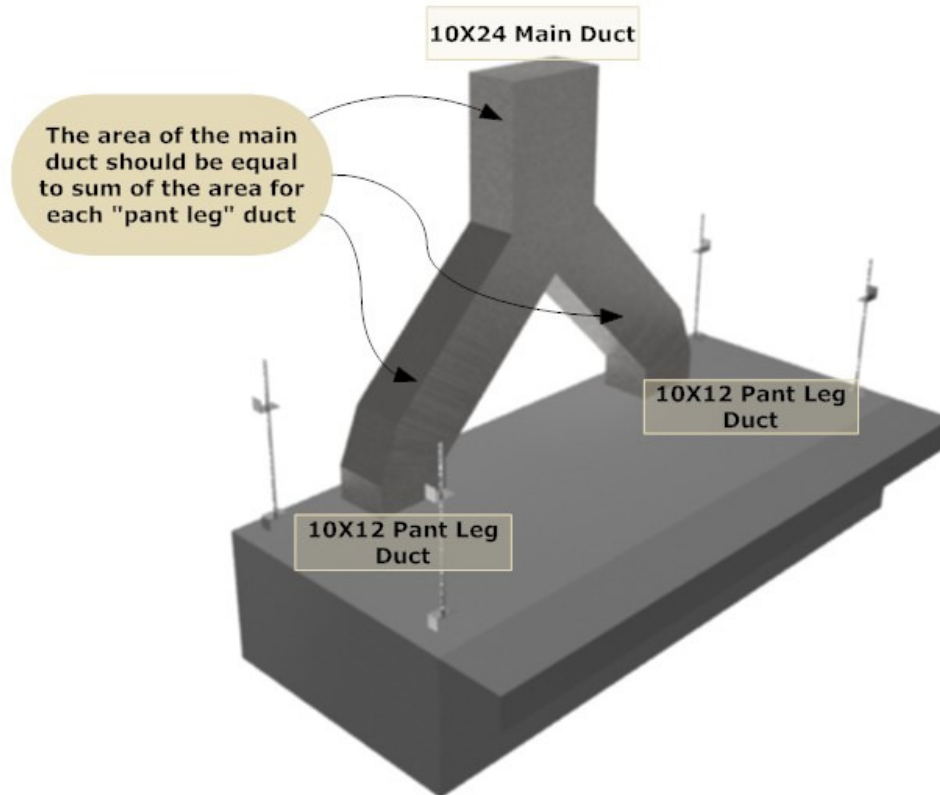
***\*Make sure that no holes are punctured onto the vent hood containment area to either install the hood or to hang items from the hood.***

## **Ductwork Installation Guideline**

Installation of duct work shall be performed by an adequate contractor. Duct work is not furnished for a vent hood unless specified by the customer. The following is a guideline only. It is the customer and contractor’s responsibility to ensure proper installation of all ductwork.

- 1) Duct work shall be installed in accordance to the NFPA96 and the local code in which the work is to be performed.
- 2) Use 16 gauge galvanized steel or 18 gauge stainless steel. You can also use duct work that is listed for commercial exhaust hoods.

- 3) All ducts must be externally welded liquid tight or in accordance with the listed duct manufactures recommendations.
- 4) Maintain the area of the collar on any duct offsets or transitions.
- 5) Angles not greater than 45 degrees should be used at all turns and expansions.
- 6) For pant leg ducts connected to a single fan use only radius throat and radius back. The main duct connected to the pant leg transition should be equal in area to the sum of the areas of each pant leg.



- 7) The recommended velocity for air traveling through the exhaust duct is 1500 FPM
- 8) Make sure you have your duct work runs planned out before you begin installation. Verify that any duct runs shown on the blue prints are possible out in the field before commencing the installation

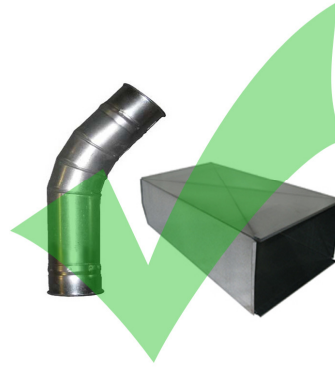
## Perforated Supply Plenum

Do Not Use Flexible duct for the supply air. Flex air duct creates a high static pressure resulting in a loss of efficiency in the movement of the air. Restrictions in the supply air can cause an improper air balance in your entire building resulting in an overall negative pressure. *Buildings should always have a positive air pressure.* Vent hoods will supply an additional 80% make up air to the building. The remaining 20% must be supplied via other mechanical means such as a fresh air louver on a package a/c unit or outside air ducted back to an air handling unit for split DX systems. Any additional air required for positive building pressure is the responsibility of the owner/mechanical contractor.



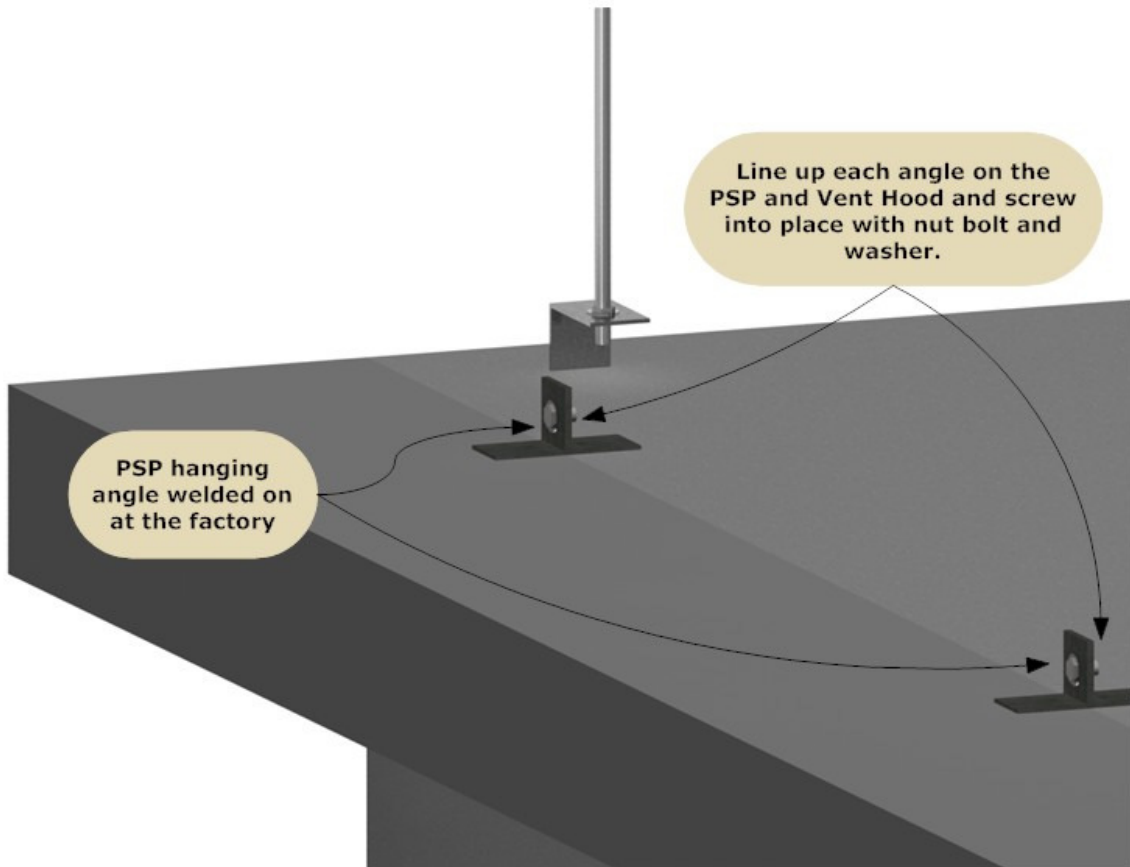


Flexible Duct



Rigid Duct

- 1) PSP Supply plenums are shipped loose. Please take the same care handling the unit as you would with the vent hood.
- 2) Raise the perforated supply plenum to the front of the vent hood.
- 3) Line up the predrilled holes on the attaching angle with the attaching angle welded onto the vent hood.
- 4) Screw them into place with a 1/2" heavy duty nut bolt and washer.



## Make-Up Air Supply Duct Installation Guidelines

Only use rigid duct work and transitions when installing supply air duct. Do not use flexible duct as it will adversely affect the performance of the hood. Make up air and exhaust air fans should be on together. Turning off the make up air fan while using the vent hood, will create a severe negative pressure. Doing so adversely affects the entire mechanical system of your building.

## **Maintenance & Care**

Most problems with vent hoods are caused by poor service or maintenance. One of the most common violations is not replacing or cleaning the grease filters regularly. The following is a maintenance guideline that should be used to ensure proper operation of your new vent hood system.

### Maintenance Routine

- 1) Wipe down excess grease from exposed surfaces when possible. Do not let grease build up unnecessarily. This increases the sanitation in your operation and decreases the risk of fire.
- 2) Proper airflow through the grease filters is essential. You must clean your filters routinely to ensure that no grease is blocking the air and reducing the efficiency of your vent hood.
- 3) Duct work should be periodically checked for leaks or damage. The supply air filters installed at the supply air fan should be clean and free of debris.
- 4) Check your fans periodically to verify that all belts, motors and electrical connections are functioning and do not need service or maintenance.

### Daily Routine

- 1) Run the grease filters through the dishwasher or soak sink to remove and prevent excessive grease build up.
- 2) Empty and clean the grease cup.
- 3) Wipe down the hood surfaces with a grease cleaning agent. You can also use a mild grease detergent solution. Clean in the direction of the grain to avoid scratching. Make sure to wipe off any excess cleaning solution from the vent hood.
- 4) Do a final wipe down of the vent hood with a clean and dry cloth. You can then reapply stainless steel polish if desired.
- 5) Do not use scrapers or wool pads to clean off the hood as this can cause scuffing and scraping of the stainless.
- 6) Do not use the following items on, near or around the vent hood: chlorine, chlorine based substances, hydro chloric acid, sulfuric acid, or chloride substances such as mercuric chloride or ferric chloride. The vapor from these substances is corrosive to stainless steel.

## **Warranty**

This unit shall be free from defective materials or defective workmanship for a period of 12 months from the shipment date. This warranty shall become void if:

- 1) The unit has been neglected, abused or used in any manner not specified by the manufacturer.
- 2) The unit is not installed by a qualified person using the steps and guidelines provided in the manufacturer's installation manual.
- 3) The equipment is not installed per the guidelines set forth in the federal, state and local codes and regulations.
- 4) Unpaid invoices within the terms of the sales agreement.

Jean's Restaurant Supply will not be held liable for damages or losses both incidental and consequential that are attributed to malfunctioning equipment. If the equipment is proven to be defective in material or workmanship within the warranty period, the manufacturer will repair or replace the part at no charge. The unit owner shall pay for all labor costs. The owner cannot return the unit to the manufacturer without prior authorization. All shipping charges for warranty repairs or replacements are the responsibility of the owner.