

# Installation and Operation Manual

## HL Series

Range Hood Liners



**Technical / Customer Support:**  
United States Tel.: 800.747.1762

Canada Tel.: 800.565.3548

 **fantech**<sup>®</sup>  
a systemair company

Note	Warning / Important note	Information	Technical information	Practical tip



**READ THESE INSTRUCTIONS COMPLETELY BEFORE INSTALLING FAN AND SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.**

- Before beginning installation, please thoroughly read and become familiar with these instructions.
- Installation and service must be completed by a qualified installer.
- Failure to properly install this product may void the warranty.

**TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**

- Use this unit only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer.
- Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag to the service panel.
- Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
- Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) or burning equipment to prevent back drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA) and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) and the local code authorities.
- Building codes require Makeup air for any hood system exhausting over 400 cfm.
- When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- Duct fans must always be vented to the outdoors.

**CAUTION:** For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.

**TO REDUCE THE RISK OF A RANGE TOP GREASE FIRE:**

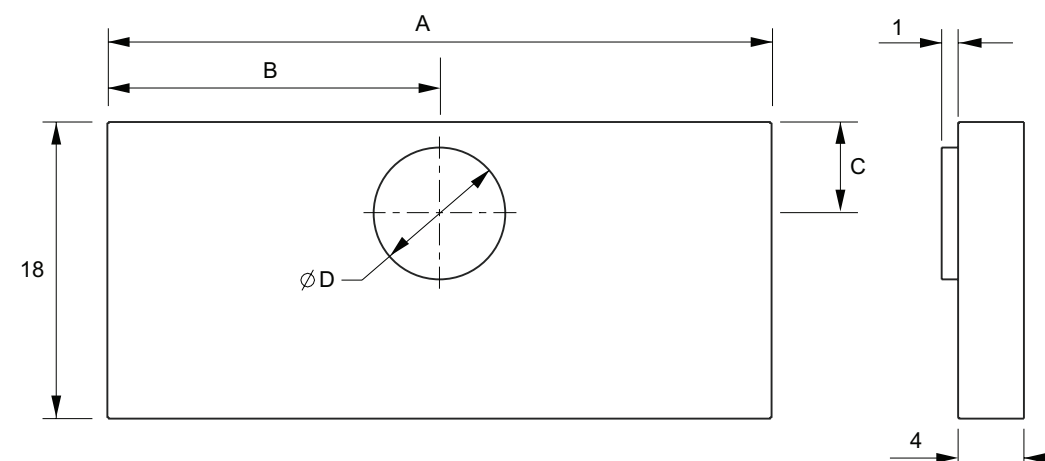
- Never leave surface units unattended at high settings. Boil-overs may cause smoking and greasy spillovers that may ignite. Heat oils slowly on low or medium settings.
- Always turn hood ON when cooking at high heat or when cooking flaming foods.
- Clean ventilating fans frequently. Grease should not be allowed to accumulate on fan or filter.
- Use proper pan size. Always use cookware appropriate for the size of the surface element.

**TO REDUCE THE RISK OF INJURY TO PERSONS IN THE EVENT OF A RANGE TOP GREASE FIRE, OBSERVE THE FOLLOWING:**

- SMOTHER FLAMES with a close-fitting lid, cookie sheet or metal tray, then turn off the burner. BE CAREFUL TO PREVENT BURNS. If the flames do not go immediately, EVACUATE AND CALL THE FIRE DEPARTMENT.
- NEVER PICK UP A FLAMING PAN You may be burned.
- DO NOT USE WATER, including wet dishcloths or towels – a violent steam explosion will result.
- Use an extinguisher ONLY if:
  - You know you have a Class ABC extinguisher, and you already know how to operate it.
  - The fire is small and contained in the area where it started.
  - The fire department is being called.
  - You can fight the fire with your back to an exit.

## Dimensions

### HL Series



Model	A	B	C	D
HL 30	28 3/8	14 3/16	5 1/2	8
HL 36	34 3/8	17 3/16	5 1/2	8
HL 42	40 3/8	20 3/16	6 1/2	10
HL 48	46 3/8	23 3/16	6 1/2	10

Dimensional information is in inches  
All dimensional tolerances are 0" to 1/16" unless otherwise stated.

## Planning the Installation



1. To reduce the risk of fire and to properly exhaust air, the liner must be exhausted to the outside. Never exhaust into a wall, an attic or a concealed area in the building. This can create a potential hazard.
2. Consult a licensed ventilation contractor or qualified technician for proper installation of exhaust ducting.
3. Locate the cooking area for minimum cross drafts – away from doors and windows, when possible.
4. Ducts must be of adequate size and duct runs should be as short as possible. Where turns are necessary, keep turning radius as large and as smooth as possible.
5. The ducting must be air tight. Use a minimum of 2 sheet metal screws at every duct joint. Then, seal the duct joints with high quality duct tape.
6. Only use ductwork constructed of materials deemed acceptable by state, municipal and local codes.

### WARNINGS: Following Are Manufacturer's Suggestions. Always Observe Local Building Codes.

- Liners installed in custom canopies constructed of combustible materials, should be installed with the combustible material structure a minimum of 36" above the surface of the heating element.
- Liners installed in custom canopies constructed of non-combustible materials, should be installed with the non-combustible material structure a minimum of 30" above the surface of the heating element.
- Follow all instructions regarding minimum safe clearances and installation location. Failure to do so may result in a safety hazard or fire.
- To reduce the risk of fire use only metal ductwork.

### Choosing the right remote mount blower (see page 7)

Look on page 7 for a list of Fantech fans recommended for use with the HL Series Range Hood Liners. Some models remotely mount in the attic. Other models are used when installation requires a roof mount or wall mount fan.



- The hood liner is designed to install inside a custom hood enclosure and operates with a remote mount blower (purchased separately). See dimensional drawings (page 3) for hood dimensions. See chart (page 7) for Fantech exhaust fans recommended for use with these units.
- A qualified person must complete the installation of this appliance.
- Plan the installation so that all minimum clearance are met or exceeded.
- **IMPORTANT:** You must provide support framing and backing in the areas in which you are securing the liner to in your custom canopy. Failure to do so could damage the liner and void the warranty.
- The HL30 and HL36 is designed for use with a 8" diameter duct. The HL 42 and HL 48 are designed for use with a 10" diameter duct. Use only rigid metal duct.
- For a truly quiet kitchen ventilation system add a Fantech "duct silencer" (LD Series) to the installation. The simple addition of an inline duct silencer between the hood liner and the remote fan can typically reduce the "perceived" sound level of the system by more than 50%. For more information visit [www.fantech.net](http://www.fantech.net).
- A quality cap with built in backdraft damper or an inline damper is recommended to minimize cold air return through the duct when the product is not in use.
- Always install ventilation products with an approved wall or roof cap.
- Duct performance is improved by using round, smooth metal duct work instead of rectangular.
- If multiple elbows must be used, ensure that there is a minimum of 24" of straight duct between any two elbows.
- Avoid "S:" or back to back configurations caused by adjacent elbows.
- Route ducting to terminate at the hood liner.

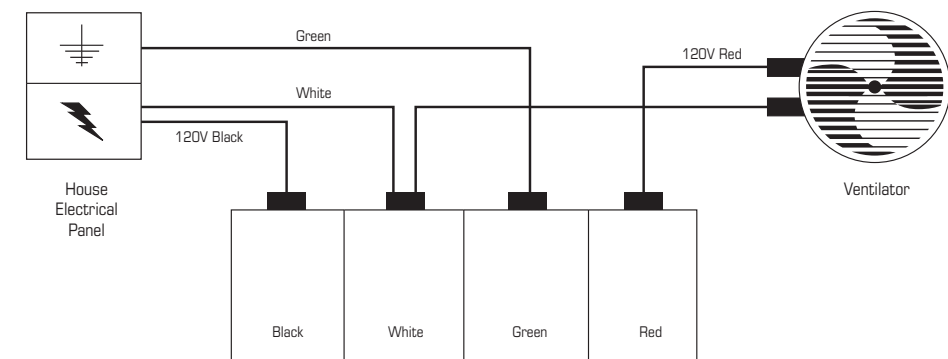
## Electrical Connections



1. Ensure that the power supply is disconnected before proceeding.
  2. Verify that the power supply matches the ratings found on the appliance data label before proceeding.
  3. The complete appliance must be properly grounded at all times when electrical power is applied.
  4. Do not ground the appliance with the neutral (white) house supply wire. A separate ground wire must be utilized.
  5. Failure to complete electrical connections properly may result in damaged or non-functional systems. Follow instructions carefully to ensure proper installation.
- It is the owner's responsibility to ensure that a qualified electrician performs the electrical connection of this appliance. The electrical installation, including minimum supply wire size, must comply with the National Electric Code ANSI/NFPA 70-1990 (or latest revision) and local codes and ordinances.
  - A copy of this standard may be obtained from: National Fire Protection Association, 1 Batterymarch Park Quincy, Massachusetts 02269-9101

### Instructions

1. A 15 to 20 amp electrical service is recommended for proper electrical supply. Before determining, calculate amp ratings based on the product label found on the liner and the ventilator. (Always observe local building codes).
2. Always use a dedicated circuit.



## Securing the Liner

### Securing instructions

1. Because the professional series liner was designed for custom applications, no mounting holes have been pre-drilled. This allows you to attach the liner in the areas of the canopy which have ample support and backing.
2. You must secure the liner through both right and left sides, through the back and through the top.
3. Remove the filters. Mark and drill screw holes through the liner as required for custom canopy. Secure the liner by driving screws (pro-

3. Line load is calculated by adding the amperage of the halogen lights to the rated amperage of the ventilator (either in-line or roof top). If the ventilator is rated in watts rather than amps, divide the watts by 120 and this will give you the amperage rating.
4. The Fantech liner is supplied with a 5.0 amp variable speed fan control. Make sure the rated amperage on the ventilator does not exceed 5.0 amps. For larger ventilators rated above 5.0 amps, contact Fantech Customer Service for recommendations.
5. The Fantech liner has been designed to accommodate several different motor speed controls, (for example Thermador™ model CTR3-Q) Always consult the manufacturer's installation instructions when substituting control switches.
6. Wire connections (see internal wiring schematic):
  - Black – 120 VAC from electrical panel (black)
  - White- Neutral from electrical panel (white)
  - Green – Ground from electrical panel (green)
  - Red- 120 VAC variable control to 120 VAC of ventilator



The neutral wire (usually white) for the ventilator must connect to the same neutral wire that comes from the electrical panel to the liner. It is recommended to run a white neutral wire from the liner's white neutral wire along the same path as the red wire from the liner's variable speed control to the ventilator.

vided by others) through the liner into the framing and backing.

### Connection to the vent pipe

1. The hood liner has an integral vent connection start collar that is welded in place at the factory. Attach the vent pipe to the start collar with a minimum of 3 equidistantly spaced screws.
2. Cover the screw heads and exposed seams with metal-backed tape.
3. Vent pipe should be supported in place separately from the hood liner. Do not use the hood liner to support the vent pipe's weight.

## Use & Care

### Operation controls

1. Always activate the ventilator whenever using cooking appliances.
2. Activate the ventilator a few minutes before starting to cook to establish an airflow pattern within the room.
3. Adjust the fan speed according to the amount of cooking exhaust.
4. Adjust the dimmable halogen lights as desired.
5. Eliminate air currents in the hood vicinity by shutting nearby windows and doors, turning off ceiling fans and closing the adjacent heating and air conditioning outlets.
6. Place your largest pans, skillets and stock pots on the rear burners whenever possible.



DO NOT operate the vent system without the filters in place, or with dirty, grease laden filters.

### Energy saving tips

1. Do not operate the blower at a speed that is higher than necessary to remove the cooking exhaust. Running at excessive speeds removes more air from the inside of the house that must be replaced by outside air. This may be especially costly when your home's heating or air conditioning system is in operation. Turn off the unit once the smoke and cooking odors have been eliminated.
2. Clean filters and grease laden surfaces often to improve efficiency.
3. Always use lids on cookware to retain heat and moisture.
4. Minimize the amount of liquid used to cook food.
5. Select cookware of proper size, material and construction for the cooking task being performed.

### Care & Cleaning

1. Proper cleaning is necessary to maintain performance and appearance, while also ensuring safe operation. The frequency of cleaning should be adjusted according to the type and amount of cooking. Best results will be achieved by cleaning soiled components as soon as possible.

2. Filters must be cleaned regularly.

Remove one filter at a time, grasp the filter handle and gently pull toward you, then down and back. Filter should be installed with the handle in the rear filter slot.

3. The filters may be cleaned by hand washing in hot water using a mild detergent solution, or by placing them in the top rack of an automatic dishwasher. Dry the filters completely before using again.

4. Stainless steel surfaces should be cleaned with a solution of mild detergent and warm water. Rinse and dry with a soft lint-free cloth.

**CAUTION:** Do not use any type of pad that will scratch the liner

5. **CAUTION:** If a commercially available stainless steel cleaner is used. It is important to read the labels for chlorine compounds. Chlorine is a corrosive substance. If these compounds are present, rinse thoroughly and dry with a soft lint-free cloth. Follow polish manufacturer's instructions.

6. Always wipe stainless steel surfaces with the grain. Never wipe across the grain.

7. After cleaning, reinstall the filters carefully.

### Replacing light bulb

It is recommended that replacement bulbs with characteristics matching those of the original bulbs are used. The original bulbs furnished with the HL Series hood liners are:

**- 50 Watt, type MR16 halogen lamp with a GU10 base**

## Choosing the Right Remote Mount Blower

Fan location	Fan model	Air Flow Rate (cfm) at 0.0" Ps	Hood Liner Model Application Air Flow Rate* (cfm)					
			Duct Size** (in)	HL 30	HL 36	HL 42	HL 48	
Remote Interior		FG 6	303	8	275	275	-	-
		FG 6XL	483	8	381	381	381	-
		FG 8	461	8	359	359	359	-
		FG 8XL	502	8	427	427	427	427
		FG 10	513	10	-	494	494	494
		FG 10XL	589	10	-	570	570	570
Remote Interior		FKD 8XL	836	8	-	440	440	440
		FKD 10	910	10	-	-	772	772
		FKD 10XL	1266	10	-	-	973	973
		FKD 12XL	2016	12	-	-	-	1384
Remote Exterior Roof or Wall		RE/REC 6	227	6	180	-	-	-
		RE/REC 8XL	409	8	355	355	355	-
		RE/REC 10XL	753	10	-	-	715	715
Remote Exterior Wall		RE/REC 10XLT	1008	10	-	-	-	883
		RVF 6	242	6	172	172	-	-
		RVF 6XL	381	8	338	338	338	-
		RVF 8XL	435	8	321	321	321	321
		RVF 10	790	10	-	-	646	646
		RVF 10L	1060	10	-	-	-	842
RVF 10XL	1245	10	-	-	-	880		

\* Hood liner model application air flow rates estimated for system with 20 feet of duct, two 90 deg. elbows, a backdraft damper, roof cap and hood filters.

\*\* Duct size is recommended for the fan's air flow rate. Size transitions may be necessary for duct connection to hood liner and fan. Other duct-mounted accessories, such as backdraft dampers, silencers, and roof caps, are recommended to be same size as duct diameter.

## Five (5) Year Warranty

This warranty supersedes all prior warranties

### DURING ENTIRE WARRANTY PERIOD:

Fantech will repair or replace any part which has a factory defect in workmanship or material. Product may need to be returned to the Fantech factory, together with a copy of the bill of sale and identified with RMA number.

### FOR FACTORY RETURN YOU MUST:

- Have a Return Materials Authorization (RMA) number. This may be obtained by calling Fantech either in the USA at 1.800.747.1762 or in CANADA at 1.800.565.3548. Please have bill of sale available.
- The RMA number must be clearly written on the outside of the carton, or the carton will be refused.
- All parts and/or product will be repaired/replaced and shipped back to buyer; no credit will be issued.

### OR

The Distributor may place an order for the warranty part and/or product and is invoiced. The Distributor will receive a credit equal to the invoice only after product is returned prepaid and verified to be defective.

FANTECH WARRANTY TERMS DO NOT PROVIDE FOR REPLACEMENT WITHOUT CHARGE PRIOR TO INSPECTION FOR A DEFECT. REPLACEMENTS ISSUED IN ADVANCE OF DEFECT INSPECTION ARE INVOICED, AND CREDIT IS PENDING INSPECTION OF RETURNED MATERIAL. DEFECTIVE MATERIAL RETURNED BY END USERS SHOULD NOT BE REPLACED BY THE DISTRIBUTOR WITHOUT CHARGE TO THE

## Limitation of Warranty and Liability

This warranty does not apply to any Fantech product or part which has failed as a result of faulty installation or abuse, incorrect electrical connections or alterations made by others, or use under abnormal operating conditions or misapplication of the product or parts. We will not approve for payment any repair not made by us or our authorized agent without prior written consent. The foregoing shall constitute our sole and exclusive warranty and our sole exclusive liability, and is in lieu of any other warranties, whether written, oral, implied or statutory. There are no warranties which extend beyond the description on the page hereof. In no event, whether as a result of breach of contract, or

## Warning

Fantech products are designed and manufactured to provide reliable performance, but they are not guaranteed to be 100% free from defects. Even reliable products will experience occasional failures and this possibility should be recognized by the user. If these products are

END USER, AS CREDIT TO DISTRIBUTOR'S ACCOUNT WILL BE PENDING INSPECTION AND VERIFICATION OF ACTUAL DEFECT BY FANTECH.

### THE FOLLOWING WARRANTIES DO NOT APPLY:

- Damages from shipping, either concealed or visible. Claim must be filed with freight company.
- Damages resulting from improper wiring or installation.
- Damages or failure caused by acts of God, or resulting from improper consumer procedures, such as:
  1. Improper maintenance
  2. Misuse, abuse, abnormal use, or accident, and
  3. Incorrect electrical voltage or current.
- Removal or any alteration made on the Fantech label control number or date of manufacture.
- Any other warranty, expressed, implied or written, and to any consequential or incidental damages, loss or property, revenues, or profit, or costs of removal, installation or reinstallation, for any breach of warranty.

### WARRANTY VALIDATION

- The user must keep a copy of the bill of sale to verify purchase date.
- These warranties give you specific legal rights, and are subject to an applicable consumer protection legislation. You may have additional rights which vary from state to state.

warranty or alleged negligence, defect incorrect advice or other causes, shall Fantech be liable for special or consequential damages, including, but not limited to, loss of profits or revenue, loss of use of equipment or any other associated equipment, cost of capital, cost of substitute equipment, facilities or services, downtime costs, or claims of customers of purchase for such damages. Fantech neither assumes or authorizes any person to assume for it any other liability in connection with the sale of product(s) or part(s). Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages so the above limitations and exclusions may not apply to you.

used in a life support ventilation system where failure could result in loss or injury, the user should provide adequate backup ventilation, supplementary natural ventilation, failure alarm system, or acknowledge willingness to accept the risk of such loss or injury.



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