

OUTDOOR COOKING

Outdoor Vent Hood - Pro Canopy

Installation, Use and Care Manual



AWARNING

IF THE INFORMATION IN THIS MANUAL IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

Installation and service must be performed by a qualified installer or service agency.

DO NOT REPAIR, REPLACE OR REMOVE ANY PART OF THE APPLIANCE UNLESS SPECIFICALLY RECOMMENDED IN THE MANUAL. IMPROPER INSTALLATION, SERVICE OR MAINTENANCE CAN CAUSE INJURY OR PROPERTY DAMAGE. REFER TO THIS MANUAL FOR GUIDANCE. ALL OTHER SERVICING SHOULD BE DONE BY A HESTAN AUTHORIZED SERVICE TECHNICIAN.

READ THESE INSTRUCTIONS CAREFULLY AND COMPLETELY BEFORE INSTALLING OR USING YOUR APPLIANCE TO REDUCE THE RISK OF FIRE, BURN HAZARD, OR OTHER INJURY. KEEP THIS MANUAL FOR FUTURE REFERENCE.





AWARNING THIS INDICATES THAT DEATH OR SERIOUS INJURY MAY OCCUR AS A RESULT OF NOT OBSERVING THIS WARNING



ACAUTION THIS INDICATES THAT MINOR OR MODERATE INJURY MAY OCCUR AS A RESULT OF NOT OBSERVING THIS WARNING.



THIS INDICATES THAT DAMAGE TO THE APPLIANCE OR PROPERTY MAY OCCUR AS A RESULT OF NOT OBSERVING THIS WARNING

INSTALLER: LEAVE THIS MANUAL WITH THE OWNER OF THE APPLIANCE. HOMEOWNER: RETAIN THIS MANUAL FOR FUTURE REFERENCE.

Message from Hestan:

Outdoor cooking is a perfectionist's pursuit, and with your new investment, you've now taken the ultimate step forward. We sincerely welcome you to the Hestan Family. We've engineered and built our products so that your guests will rave about your meal, but deep down, our customers know it could've been just a little more tender, juicier – a pinch more salt in the rub or a few seconds less on the flame. Yes, we've taken the time to know our Hestan customer and we're excited to be on this journey with you. Hestan Outdoor was born from this same perfectionist passion. Our engineers experimented, innovated, tweaked and tinkered until they created the most powerful, versatile and reliable outdoor products available.

We pride ourselves on restless innovation, superior engineering and purpose-built designs, but also our in-depth understanding of our target consumer and the interests and needs of the ultimate end-users we serve and covet. For many consumers, cooking outdoors is much more than an act of food preparation. It's a lifestyle activity that encompasses culinary, leisure and social pursuits among others.

We are thankful and proud that you have chosen Hestan, and we yearn to have you as a customer for life. We take your decision to choose Hestan most seriously, and we promise to deliver the very best to you.

Welcome to Hestan Outdoor



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SAFETY PRECAUTIONS - BEFORE YOU BEGIN

When properly cared for, your Hestan Outdoor ventilation system will provide safe, reliable service for many years. When using this ventilation system, basic safety practices must be followed as described in the following pages.

IMPORTANT: Save these instructions for the local Utility Inspector's use.

INSTALLER: Please leave these Installation Instructions with the owner.

OWNER: Please read these Instructions and save them for future reference.

AWARNING

ELECTRICAL SHOCK HAZARD

It is the responsibility of the user to have the appliance connected by a licensed electrician in accordance with all applicable codes and standards, including fire-related construction. See "Step 17 - WIRING CONNECTION" on page 17 for details.

ELECTRICAL SUPPLY AND GROUNDING

- This appliance must be grounded. See "Step 17 WIRING CONNECTION" on page 17 for instructions.
- This appliance must be connected to 120 VAC Single Phase, 60 Hz, with a 20 amp dedicated circuit.
- OWNER: Have the installer show you where the electric circuit breaker is located so you know how to shut off the power to this appliance.

Suitable for use in covered outdoor applications when installed in a GFCI protected branch circuit.

SAFETY PRECAUTIONS - BEFORE YOU BEGIN (CONT.)

GENERAL SAFETY PRECAUTIONS

When properly cared for, your new Outdoor Pro Canopy has been designed to be a safe, reliable ventilation system. Read all instructions carefully before using this ventilation system. When using cooking appliances, basic safety precautions must be followed.

AWARNING

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

- a) Use this ventilation system only as intended by the manufacturer. If you have any questions, contact the manufacturer.
- b) 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.



FOR GENERAL VENTILATING USE ONLY. DO NOT USE TO EXHAUST HAZARDOUS OR EXPLOSIVE MATERIALS AND VAPORS.

AWARNING

TO REDUCE THE RISK OF A GREASE FIRE:

- a) Never leave burners or surface units unattended at high settings. Boilovers cause smoking and greasy spillovers that may ignite. Heat oils slowly on low or medium settings.
- b) Always turn hood ON when cooking at high heat or when flambéing food (i.e. Crepes Suzette, Cherries Jubilee, Peppercorn Beef Flambé).
- c) Clean ventilating fans frequently. Grease should not be allowed to accumulate on fan or filter.
- d) Use proper pan size. Always use cookware appropriate for the size of the burner or surface element.

AWARNING

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

- a) TURN OFF ALL BURNERS. If the fire is contained in a small area, you may attempt to SMOTHER FLAMES with a close-fitting lid, cookie sheet, or metal tray. For a grill, closing the lid may not always smother the flames. BE CAREFUL TO PREVENT BURNS. If the flames do not go out, shut off the gas supply, EVACUATE AND CALL THE FIRE DEPARTMENT.
- b) NEVER PICK UP A FLAMING PAN You may be burned.
- c) DO NOT USE WATER, including wet dish cloths or towels a violent steam explosion will result.
- d) Use an extinguisher ONLY IF:
 - 1. You have a Class ABC or Class K fire extinguisher and you already know how to operate it.
 - 2. The fire is small and contained in the area where it started.
 - 3. The fire department is being called.
 - 4. You can fight the fire with your back to an exit.

^{*} Based on "Kitchen Fire Safety Tips" published by NFPA.

SAFETY PRECAUTIONS - BEFORE YOU BEGIN (CONT.)



AWARNING

BURN HAZARD

This outdoor ventilation system is intended for use with Hestan or Aspire grills which can get very hot during operation. Observe the warnings and cautions found in the grill manual.

This ventilation system should be serviced only by a Hestan authorized service technician. Contact the nearest authorized service center for examination, repair or adjustment.

Do not repair or replace any part of the system unless specifically recommended. Refer service to an authorized servicer.

Do not operate this ventilation system if it is not working properly or if it has been damaged, until an authorized servicer has examined it.

Install or locate this ventilation system only in accordance with the Installation section of this manual. Do not cover or block any openings on this ventilation system.

It is highly recommended that a suitable kitchen fire extinguisher (Class ABC or K) be readily available and highly visible next to any outdoor cooking appliance.

SAFETY DURING CLEANING

Clean only ventilation system parts listed in this manual, in the manner specified in this manual.

Note: the "ventilating fans" and "filter" in the previous warnings refer to the blower wheel(s), blower housing(s), and blower shield(s).

THIS MANUAL SHOULD REMAIN WITH THE HOMEOWNER FOR FUTURE REFERENCE.

MODEL NUMBERS

MODEL NO.	DESCRIPTION	BLOWER PACKAGE	RECOMMENDED FOR GRILL SIZE
GVP42	42" Pro Canopy 900 cfm Outdoor Ventilation System	WM2L Dual + WM1L Single	30"
GVP48	48" Pro Canopy 1200 cfm Outdoor Ventilation System	Two WM2L Duals	36"
GVP54	54" Pro Canopy 1200 cfm Outdoor Ventilation System	Two WM2L Duals	42"

POWER AND FLOW RATINGS

Blower Package	Amps	CFM SP@o.o"*	Equivalent CFM **	CFM SP@0.1"*	CFM SP@0.2"*	CFM SP@o.3"*	Minimum Round Duct Size	Sones ***
WM2L Dual + WM1L Single	6.0	900	1350	804	725	655	AKVT6810: 10" (79 in.²)	6.3
Two WM2L Duals	7.5	1200	1800	1062	960	860	AKVT8812: 12" (113 in.²)	6.6

All units 115 VAC 60 Hz 1550 RPM

- * Static Pressure in inches water column.
- ** When comparing the Hestan system with blower units made by other manufacturers, use the "Equivalent CFM".
- *** Ratings in accordance with the Standard Test Code by the Energy Systems Laboratory of the Texas Engineering Experiment Station. The number shown is at the highest fan speed.

RATING LABEL

The rating label contains important information about your Hestan appliance such as the model and serial number, electrical rating and the minimum installation clearances.

The rating label is located on the blower housing.

If service is necessary, contact Hestan Customer Care with the model and serial number information shown on the label.



Typical rating label



Rating label location

REGULATORY / CODE REQUIREMENTS



This appliance must be electrically grounded in accordance with local codes or in the absence of local codes with the National Electrical Code ANSI/NFPA 70, or Canadian Electrical code CSA C22.1.

USING THE VENTILATION SYSTEM



FEATURES OF THE VENTILATION SYSTEM

Speed controls are provided for each blower assembly. Two-blower systems will have one speed control knob, while three or four-blower systems will have two speed control knobs.

A control knob is provided for lighting intensity.

The controls layout will be similar to that shown below.

USING THE HOOD

The user can start with the a hood on the lowest setting, and then increase speed and/or turn on additional blowers as required. Using the hood at high settings may increase heating or air conditioning requirements and costs for the house.

BLOWER CONTROL KNOB

To operate the blower(s), rotate the knob through the blower speed settings by turning it clockwise (facing the knob).

Rotate the knob counter-clockwise to reduce the blower speed.

LIGHT CONTROL KNOB

To operate the lights, rotate the knob through the light intensity settings by turning it clockwise (facing the knob). Rotate the knob counter-clockwise to dim the lights or turn them off.

Controls for two blowers



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ltem	Function
1	Blower control
2	Light control
3	Blower control blowers 1 & 2
4	Blower control blower 3 or blowers 3 & 4

CLEANING AND MAINTENANCE

CLEANING THE VENTILATION SYSTEM

Cleaning requirements depend completely on usage and environment. The more high-heat and/or greasy cooking, the more often the hood and blower will need cleaning.

The grease tray and blower aren't visible from the outside, so they must be removed for inspection.

After you've inspected the tray a few times over the course of six months or a year, you'll be able to set a cleaning schedule according to your usage pattern.

HOOD CANOPY

Wipe down the interior and exterior of the hood as needed with a soft cloth and warm soapy water (liquid dish detergent is acceptable). Do not use acids, abrasives, strong detergents, solvents, or scouring pads. Stainless steel should be treated with a quality stainless steel cleaner such as Stainless Steel Magic®. Follow all label instructions. Do not polish across the grain or in circles.

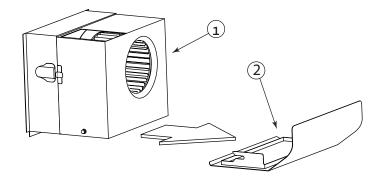
BLOWER HOUSING AND SHIELD



To reduce the risk of personal injury, be sure the power is turned off in the hood before removing the shield(s) and blower housing(s).

The blower captures grease by-products in the blower housing(s) and blower shield(s). The blower shields require more frequent cleaning than the blower housing, but cooking usage determines how often each item will need to be cleaned.

Item #	Description	
1	Blower housing with damper(s)	
2	Blower shield	



BLOWER SHIELD REMOVAL

The blower shields are easily removed for cleaning by pulling the blower shield(s) toward the front of the hood.



Be careful to keep the tray level if the hood has been recently used and the grease might still be warm.

Inspect and clean the blower shield (Details follow)

BLOWER HOUSING REMOVAL

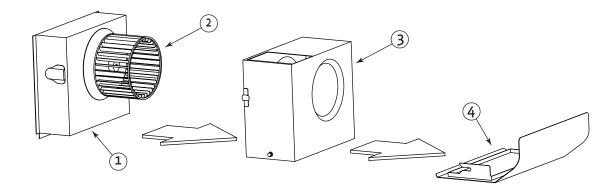
To remove the blower housing:

- 1. Unsnap two suitcase latches, one on each side of the housing.
- 2. Support the housing and pull it away from the blower base.
- 3. While pulling it back, gently "tip" it downward to clear the blower wheel(s).



CLEANING

Clean the shield(s) and/or blower housing(s) in a sink of warm soapy water (liquid dish detergent) and let soak for a few minutes. Wash with a sponge or dishcloth, rinse and let drain before reinstalling. Alternatively, the blower housing(s) and blower shield(s) may be placed into a dishwasher. Handle the plastic blower housing dampers with care. They must move freely.



Item #	Description
1	Motor housing
2	Wheel
3	Blower housing with damper(s)
4	Blower shield

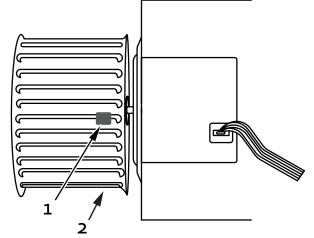
the hood before removing the shield(s) and blower housing(s). To reduce the risk of personal injury, be sure the power is turned off in

Regular cleaning of the blower housing should prevent grease accumulation on the blower wheel. If grease build-up should occur, the blower wheel may easily be cleaned in place using a soft bristle toothbrush and a common degreaser such as Formula 409®.

NOTICE

Take care not to move or lose the metal balancing clips that may be affixed to the wheel.

Item #	Description
1	Balancing clip
2	Blower wheel



BLOWER WHEEL REMOVAL

For instances where the blower wheel must be removed, follow the instructions below.

• Removing the blower wheel requires a 1/8" hex wrench. This may be obtained from your local hardware store or tool supply.

The wheel is retained by a set screw on the side of the hub of the wheel that tightens up against a "flat" spot on the motor shaft.

- 1. Locate the set screw on the side of the hub of the wheel.
- 2. Insert wrench through the blades of the blower wheel and into the set screw.
- Loosen the set screw 1/2 turn counterclockwise.

If the wheel is difficult to remove, the area where the motor shaft makes contact with the blower wheel hub may need to be sprayed with a common penetrating oil such as WD-40[®].

After allowing the penetrating oil to soak for a few minutes, push the blower wheel forward slightly, then gently pull the blower wheel off the motor shaft.

• Use caution to avoid bending or distorting the blower wheel and take care not to move or lose the metal balancing clips that may be affixed to the wheel.

A soft bristle toothbrush with warm soapy water may be used to clean the blades, or soak the blower wheel in warm soapy water.

BLOWER WHEEL INSTALLATION

When reinstalling the wheel onto the motor shaft, make sure the set screw makes direct contact with the "flat spot" on the motor shaft.

- 1. Slide the blower wheel onto the motor shaft as far as it will go, making sure the back of the blower wheel does not touch the motor mount screws protruding from the motor.
- If the motor is too far back, it will rub the motor mount screws, and if it is too far forward, it will rub the inside of the blower housing.
- 2. Adjust the blower wheel slightly to find the correct front-to-rear location.
- 3. Tighten the set screw (clockwise) to lock the blower wheel in the correct position.



For hoods that have more than one blower wheel, make sure that white blower wheels are matched up with white motor rings, and black blower wheels are matched up with black motor rings.

The hood will not perform properly if blower wheels and motors are mismatched.

MOTOR REPLACEMENT



To reduce the risk of personal injury, turn off power to the hood at the breaker or the circuit disconnect before attempting to remove the blower motor.

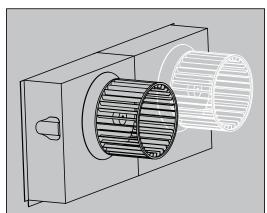
MOTOR IDENTIFICATION AND POSITIONING

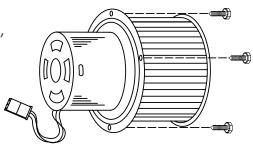
Motors are color-coded; black and white motors have different rotations and must be installed in the correct positions.

- Housings with a single blower use a white blower and wheel.
- Housings with two blowers use a white blower on the right and black on the left.

Make sure you have the correct motor in each housing position.

- If the replacement blower motor includes a blower wheel, then you can remove the motor and wheel together. If you will re-use your existing wheel, then you may wish to remove the wheel before removing the motor.
- 1. Remove the shield and blower housing as described in "BLOWER WHEEL REMOVAL" on page 8.
- 2. Use a 1/4" nut driver to remove the three motor mount screws that attach the motor to the base.
- 3. Gently pull the motor forward and down.
- 4. Disconnect the wiring harness, remove the old motor.
- To avoid damage to the blower wheel, you may wish to install the motor and then install the wheel onto the motor.
- 5. Lift the new motor so you can connect the wiring harness. Be sure to fully engage the electrical connections and tighten the motor mount screws.
- 6. Check the blower wheel clearance and adjust as needed, as described in "BLOWER WHEEL INSTALLATION" on page 8.





LED LIGHT REPLACEMENT



To reduce the risk of personal injury, turn off power and allow lights to cool before proceding.

LED LIGHTS

Replace the light with a genuine factory replacement part (Hestan P/N 025075)

- 1. Turn off power at the breaker.
- 2. Use caution when pulling down on the old light to prevent the springs from snapping back against your hand. See Fig 1. and Fig 2.







- 3. Once the light is hanging beneath the light panel (Fig 3), simply disconnect the old light from the harness via the quick connect adapter.
- 4. Remove and discard the wire and plug section from the harness on the new light. Connect the new light to the hood wiring harness via the quick connect adapter.
- 5. While securing the slack in the wires, feed the wires into the light panel and insert the new light into the panel opening. You will need to press the springs on the light far enough backward to be able to fit them into the light panel. Use caution when inserting the new bulb to prevent the springs from snapping back against your hand or the light casing.
- 6. Turn the power back on at the breaker and test all blower and light functions to ensure they are operating properly.



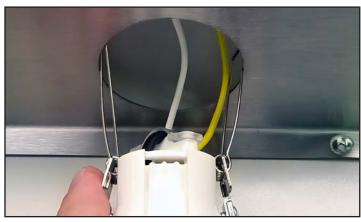


Fig 3.



TROUBLESHOOTING

If the hood does not perform satisfactorily, check the following:

- Do the blowers run?
- Are the blower wheels installed on the correct motors? (black wheel on black motor, white wheel on white motor)
- Are the motor and wheel assemblies installed in the correct locations?
- Check the damper doors in hood behind/above blowers do they move/open freely?
- Check the dampers/vents to outside do they open freely, with no obstructions?
- Check for damaged or obstructed ductwork.

DUCTING DO'S AND DON'TS



GENERAL REQUIREMENTS

Observe local codes regarding special duct requirements and placement of duct work against combustibles.

- Using recommended transitions (see VENT ACCESSORIES) will ensure proper efficiency.
- Using recommended roof caps or wall louvers (see VENT ACCESSORIES) will ensure proper efficiency.
- Use foil HVAC tape (not grey cloth duct tape) to seal all joints.
- The hood must be ducted to the outdoors without restrictions.

ELECTRICAL REQUIREMENTS

This appliance requires 120 VAC Single Phase, 60 Hz, with a 20 amp dedicated circuit with GFCI protection. This appliance must be grounded. See "Step 17 - WIRING CONNECTION" on page 17 for instructions.

BLOWER REQUIREMENTS

The dual blower unit (WM2L, used in all systems) requires 8" round duct or equivalent (50 square inches). The single blower unit (WM1L, used in addition to the dual blower unit in 900 CFM systems) requires 6" round duct or equivalent (28 square inches).

COMBINED DUCT SIZE AFTER A TRANSITION

Single and Dual (WM1L & WM2L) combine to 10" round or equivalent 79 sq. in. using a multi-blower transition such as AKVT6810 (Optional).

Two Duals (Two WM2Ls) combine to 12" round or equivalent 113 sq. in. using a multi-blower transition such as AKVT8812 (Optional).

DUCTING REQUIREMENTS (DO'S AND DON'TS)

- NEVER reduce the duct size. When combining ducts together, the square inch area of the outlet duct must be equal or greater than the total square inch area of the ducts being combined.
- Only use smooth, galvanized, metal duct. Do not use flexible or corrugated duct. This type of duct will restrict airflow and reduce performance.
- Make the duct run as short and as straight as possible with as few turns as possible.
- Avoid sharp-angled turns. Instead, use smooth, gradual turns such as adjustable elbows or 45 degree angled turns.
- For duct runs over 20 feet, increase the duct diameter by one inch for every ten feet of duct.
- When planning length, a 90 degree elbow is equivalent to 5 feet of duct.

TERMINATION REQUIREMENTS

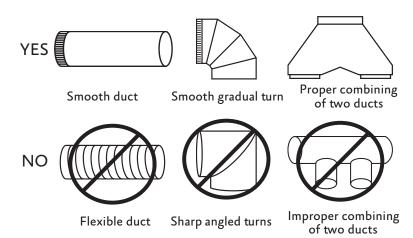
Airflow must not be restricted at the end of the duct run.

A wall louver or roof cap is required for each duct run.

Every wall louver or roof cap must include a gravity damper to prevent back drafts.

Do not use screen wire or springloaded doors on wall louvers or roof caps.

Do not terminate venting into an attic or chimney.



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AWARNING

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

- a) Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
- b) Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel 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.
- When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- d) Ducted fans must always be vented to the outdoors.

AWARNING

TO REDUCE THE RISK OF FIRE, USE ONLY METAL DUCTWORK.

TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT USE THIS BLOWER WITH ANY SOLID-STATE SPEED CONTROL DEVICE.

INSTALLATION DETAILS

Read all instructions thoroughly before beginning installation. These instructions apply to Hestan outdoor hoods, when mounted over a Hestan or Aspire grill. YOU MUST FOLLOW THE GRILL CLEARANCES DESCRIBED IN YOUR GRILL INSTALLATION MANUAL.

AWARNING

FOR NON-COMBUSTIBLE LOCATIONS ONLY!! This appliance is wall-mounted and must NOT be installed on or next to unprotected combustible construction, and must be covered by a protective roof to prevent water intrusion. A minimum clearance to vertical combustible material, such as adjacent walls, is 24" [61 cm] on the sides of the appliance (see Fig. 1). Duct covers are also available to conceal the ductwork and wiring above the vent. A GFCI protected branch circuit is required.

ALL construction materials in the wall immediately behind the vent and the appliance below (usually a grill), and within the 24" [61 cm] zone must be non-combustible. As an example, if you have a stucco or tiled surface and wood-frame construction beneath, or wood-frame walls adjacent or behind, the wood is considered combustible, even though the vent or grill is touching the stucco or tiled surface, which is non-combustible. In extreme circumstances, the wood could potentially get hot enough to burn.

Similarly, if you have the hood mounted over a free-standing grill which is parked close to these surfaces when grilling over an extended period of time, enough radiant heat could reach the wood and potentially get hot enough to burn, in extreme circumstances.

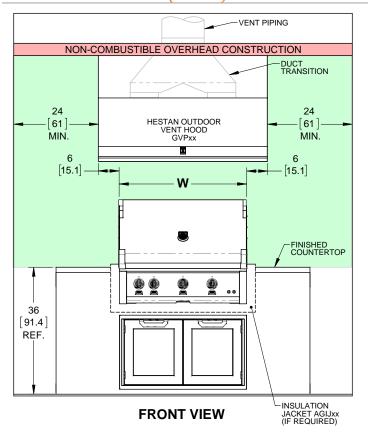
Construction materials such as metal studs with cement board and stucco/stone surfaces are ideal for this application.

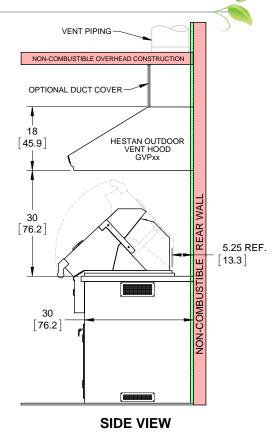
A minimum of 5" [12.7 cm] clearance behind the grill is needed to open the hood, and to adequately capture smoke and vapors from the cooking area.

THE VENT HOOD MUST BE TURNED ON AT ALL TIMES WHEN THE GRILL IS ON.

Construction methods and installation must comply with all local building codes.

See Fig. 1 on the next page for details.





NOTES:

"W" IS THE WIDTH OF THE GRILL.

Fig. 1

DIMENSIONS IN [] ARE IN CM.

GRILL WIDTH	RECOMMENDED VENT HOOD
30" [76.2]	GVP42
36" [91.4]	GVP48
42" [106.7]	GVP54

- 1. Read all instructions thoroughly before beginning installation. See "DUCTING REQUIREMENTS (DO'S AND DON'TS)" on page 10.
- Weight and size: For safe installation, at least two people should be present to lift and hold the hood. For larger hoods and installations with duct covers, it is advisable to have a third person present to assist.
- Back Venting: If venting out the wall behind the vent instead of venting through the ceiling, see "BACK VENTING" on page 18 for details.
- 2. When installing a wall mount range hood, it is recommended that the bottom edge of the hood be located 30" [76.2 cm] above the cooking surface for optimum performance.
- 3. Select the appropriate installation method.
 - Method 1 is suitable for applications where the top of the hood (blower outlet(s) location) is accessible after the hood is mounted on the wall and when a Hestan duct cover will be used.
- NOTE: Since Hestan duct covers can be opened for access, they can be installed with the hood and still permit access to connection points. The duct cover frame requires that the hood and duct cover be installed together.

Method 2 is suitable for applications where the top of the hood (blower outlet(s) location) is not accessible after the hood is mounted on the wall.



CAUTION Make sure that once the hood is mounted the motor cooling vents are not obstructed.

4. IF THE HOOD IS TO BE "BACK VENTED", PROCEED DIRECTLY TO STEP 5.

Consult the connection diagrams (following) for further details on exhaust outlet placement.

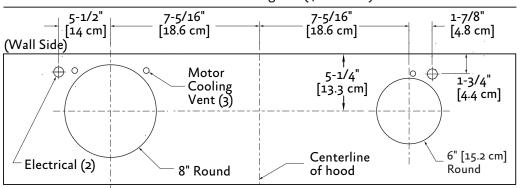
- Method 1: Install the duct(s) from the outside of the home down to the location of the exhaust outlet(s) on the top of the hood or to the transition (if applicable).
 - If a transition is used, install duct down to the location of the transition outlet plus 1"
 [2.5 cm]. This will allow the transition to engage 1" [2.5 cm] inside of duct.
- Method 2: Install the duct(s) from the outside of the home to the ceiling over the exhaust outlet(s) on the hood. The end of the duct(s) should extend 1" [2.5 cm] below the ceiling.
- Use foil HVAC tape (not grey cloth duct tape) to seal all joints. See "VENT ACCESSORIES" on page 19 for a listing of available Hestan ducting materials.

TRANSITION HEIGHTS:

- Single and Dual Blower (WM1L + WM2L = 900 CFM): 6" round duct will connect directly to the top of the hood; 8" round will connect directly to the top of the hood. If using the optional multi-blower transition (AKVT6810, sold seperately), a 10" round duct connects to it 17-1/2" above top of hood. See "VENT ACCESSORIES" on page 19 for details.
- Two Dual Blowers (Two WM2Ls = 1200 CFM): Two 8" round ducts connect directly to the top of the hood. If using the optional multi-blower transition (AKVT8812, sold seperately), a 12" round duct connects to it 16-1/2" above top of hood. See "VENT ACCESSORIES" on page 19 for details.

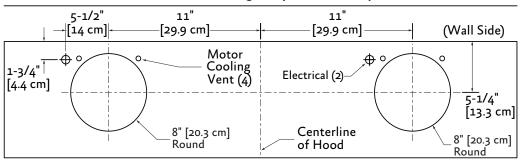
CONNECTION DIAGRAMS

Connection Diagram (42" width)



WM2L Dual + WM1L Single Blower (900 CFM) (Top View)

Connection Diagram (48-54" widths)



Two WM2L Dual Blowers (1200 CFM)

(Top view)

- 5. Remove the hood from its packaging and place the back of the hood on the floor or countertop in front of the wall where it will hang.
- 6. With the hood on its back facing you, remove the blower shield(s) and blower housing(s) as follows:
 - a) Remove the shipping tape that is securing the blower shield(s) inside the hood.
 - b) Remove the blower shield(s) by lightly pulling it toward the front of the hood.
 - c) Gently close the back draft damper(s) from the top side of the hood.
 - d) To remove the blower housing(s), unsnap the suitcase latches (one on each side of the housing).
 - e) Support the housing and lift it away from the blower base, then tip it back toward you to clear the blower wheel(s), and then pull it from the hood.

AWARNING

Make sure power is off at the supply panel / breaker during service or installation.

- 7. One blower motor must be removed from each blower assembly to access the connection box(es). The blower assembly will have a decal identifying the location of the connection box(es). It is not necessary to remove the blower wheel from the motor.
 - a) Remove the three screws retaining the blower motor.
 - b) Pull the motor out far enough so you can reach its electrical connector.
 - c) Unplug the connector, set the blower motor and screws aside.
- 8. WIRING PREPARATION:
 - a) Install an appropriate 1/2" UL listed electrical wire clamp through each motor box electrical opening on top of the hood.
 - b) Install electrical wiring from the service panel to the hood location for each motor box. Consult the connection diagrams (on previous page) for further details on electrical placement. See "ELECTRICAL SUPPLY AND GROUNDING" on page 1 for power requirements.
 - Method 1: Extend wiring to 30" [76.2 cm] above the countertop. Electrical connection(s) will occur after the hood is installed on the wall.
 - Method 2: Extend wiring to the hood. Electrical connection(s) will occur before the hood is installed on the wall.
- 9. Mark the wall at the lower edge of the hood opening:
 - a) If using a duct cover:
 - i. Carefully remove the knockouts from the top four corners of the hood.
 - ii. Remove the duct cover from its packaging and remove the mounting screws from the base of the duct cover.
 - iii. Place the duct cover on the top of the hood and secure it temporarily through the knockout openings using the mounting screws previously removed.
 - The front panel may be removed from the duct cover during handling to reduce weight.
 - b) Lift the hood (and duct cover assembly if used) to the location on the wall where it will be installed.

- c) Lightly mark the wall with a short, horizontal mark along the bottom edge of the hood.
- d) When finished, remove the hood and duct cover assembly from the wall.
- 10. Find location of mounting strip:
 - a) On the back side of the hood, measure the distance between the bottom edge of the hood and the top edge of the wood mounting strip.
 - b) Measure this distance above the horizontal mark made in Step 9 and lightly mark the wall with a level, horizontal line.
 - c) Measure where the center (left to right) of the hood will be and mark the upper, horizontal line on the wall with a short, vertical centerline.
- 11. Attach the mounting strip to the wall as follows:
 - a) Remove the screws inside the top of the back of the hood that retain the wood strip that is recessed in the mounting channel. Note: Some retaining screws may be located behind the blower(s).
 - b) Remove the wood mounting strip from the back of the hood and place the top edge of the strip on the upper, level, horizontal line on the wall.
 - c) Referencing the vertical centerline from Step 10, place the mounting strip on the wall so it is centered (left to right) in the space where the hood will be located. Mark the strip at two or more stud locations, and drill clearance holes in the strip to prevent splitting.
 - d) Using proper hardware, attach the mounting strip to at least two wall studs. Note: for 48" [122 cm] and larger hoods, three screws into studs are recommended.
- 12. FOR BACK VENTING APPLICATIONS ONLY. IF NOT BACK VENTING, PROCEED DIRECTLY TO STEP 13.
- Note: Wall studs may interfere with back venting installations. Additional framing may be required. It is necessary to cut duct access hole(s) in the wall prior to installing the hood.
- If using a duct cover, this step may be done with the duct cover removed from the hood. The duct cover must still be mounted to the hood before mounting the hood to the wall.

Method 1:

- a) Hold the hood on the mounting strip by aligning the channel at the top of the back of the hood over the wood mounting strip on the wall.
- b) Place the appropriate elbow(s) on top of the hood in line with the hood exhaust collar(s). On the wall, trace around the elbow(s). Remove the hood and elbow(s) from the wall.
- c) Cut around the outside of the traced line(s), avoiding wall studs. Install the duct from the outside of the home to the opening in the wall. Use HVAC foil tape (not grey cloth duct tape) to seal joints.
- d) Proceed to step 14.

Method 2:

- a) Use the the connection diagrams (page 14), "BACK VENTING" on page 18, and "VENT ACCESSORIES" on page 19 as a guide. Install the duct(s) from the outside of the home to the wall so they will meet the exhaust elbows to be used.
- b) The end of the duct(s) should extend 1" past the ends of the elbows.
- c) Proceed to step 14.



- 13. Check mount holes to wood strip, drill if needed:
 - a) Hang the hood on the mounting strip by aligning the channel at the top of the back of the hood over the wood mounting strip on the wall.
 - b) While holding the hood in place, determine if the mounting holes in the channel at the top of the back of hood align with the existing holes in the mounting strip. If they don't, mark the hole locations on the mounting strip.
 - c) Remove the hood and drill 3/32" pilot holes in the center of the marks in the wooden mounting strip to avoid splitting.

14. MOUNTING THE HOOD:

FOR BACK VENTING APPLICATIONS ONLY. IF YOU ARE NOT BACK VENTING, PROCEED DIRECTLY TO STEP 15.

• If using a Hestan duct cover, it must be mounted to the hood using the provided fasteners before continuing.

Method 1:

- a) Place the appropriate elbow(s) on the top of the hood. Elbow(s) should be placed with the non-crimped end(s) on the inside of the collar(s) of the exhaust outlet(s). Use HVAC foil tape (not grey cloth duct tape) to seal joints.
- b) Lift the hood up to the wall and hang the hood on the mounting strip, taking care to properly align the duct connection(s) between the elbow(s) and the duct(s) in the wall.
- c) Secure the hood to the mounting strip by installing the screws (previously removed from the strip in Step 11) into the pilot holes drilled in Step 13.
 - Caution must be taken to avoid scratching the hood or ceiling.

Method 2:

- a) Place the appropriate elbow(s) on the top of the hood. Elbow(s) should be placed with the non-crimped end(s) on the inside of the collar(s) of the exhaust outlet(s). Use HVAC foil tape (not grey cloth duct tape) to seal joints.
- b) Insert the electrical wire from the service panel into the electrical wire clamp on each motor box. Tighten the wire clamp(s).
- c) While securing the slack in the wire, lift the hood up to the wall and hang the hood on the mounting strip, taking care to properly align the duct connection(s) between the elbow(s) on the hood and the duct(s) in the wall.
- d) Secure the hood to the mounting strip by installing the screws (previously removed from the strip in Step 11) into the pilot holes drilled in Step 13.
- IF BACK VENTING, SKIP STEP 15. PROCEED DIRECTLY TO STEP 16.
- 15. Mounting the Hood, NON-Back Venting:
 If using a transition, install it on the insides of the exhaust collars and seal with HVAC tape (not grey cloth duct tape). Then mount the hood as follows:

Method 1:

- a) Lift the hood (and duct cover, if used) up to the wall and hang the hood on the mounting strip, taking care to properly align the duct connection(s) between the hood and the duct in the ceiling.
- b) Secure the hood to the mounting strip by installing the screws (previously removed from the strip in Step 11) into the pilot holes drilled in Step 13.



- c) Use HVAC tape (not grey cloth duct tape) to seal joints. Insert the electrical wire from the service panel into the electrical wire clamp on each motor box.
- d) Tighten the wire clamp(s).

Method 2:

- a) Insert the electrical wire from the service panel into the electrical wire clamp on each motor box. Tighten the wire clamp(s).
- b) If not using a transition, cut a piece of duct for each outlet of sufficient length to meet the duct(s) in the ceiling.
- c) If a transition is used, cut the duct to reach the transition outlet plus 1". This will allow the transition to engage 1" inside of the duct. See "TRANSITION HEIGHTS:" on page 13.
- d) One end of the duct must be crimped to fit inside the duct in the ceiling. Insert the non-crimped end over the transition or into the exhaust collar(s) on the top of the hood and seal with HVAC tape.
- e) While securing the slack in the wire, lift the hood up to the wall and hang the hood on the mounting strip, taking care to properly align the duct connection(s) between the hood and the duct in the ceiling.
- f) Secure the hood to the mounting strip by installing the screws (previously removed from the strip in Step 11) into the pilot holes drilled in Step 13.
- 16. If a Hestan duct cover is used, it should be secured to at least one stud using the nailing strips. The duct cover front panel should then be installed.

17. WIRING CONNECTION:

From inside the hood, using UL listed wire nuts, attach the "neutral" wire(s) to the white lead(s), the "hot" wire(s) to the black lead(s), and the ground wire(s) to the green lead(s) inside the motor box(es).

AWARNING DO N

DO NOT OPERATE HOOD WITHOUT PROPER GROUND CONNECTION.

- 18. Install the blowers motor(s) by plugging the wiring connectors in and securing the blower motor(s) using the retaining screws that were removed in Step 7.
- 19. Replace the blower housing(s) and the blower shield(s). Make sure that the damper(s) open and close smoothly.
- 20. Turn power ON, verify operation: See "USING THE VENTILATION SYSTEM" on page 5 for proper hood operation. Test all blower and light functions to ensure they are operating properly.



BACK VENTING

When venting out through the wall, one or two elbows are required, depending on the blower configuration:

DUCT COVERS AND BACK VENTING

Low profile elbows may interfere with the duct cover frame. Mount the duct cover to the hood, and test fit the elbow(s) to confirm proper fit.

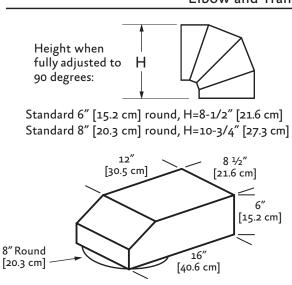
ELBOWS FOR 900 CFM

Units with 900 CFM blower systems require one 8" elbow and one 6" elbow.

ELBOWS FOR 1200 CFM

Hoods with 1200 CFM blower systems require two 8" elbows, one for each 600 CFM blower unit.

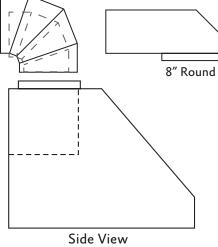
Elbow and Transition Heights



Low profile Elbow: 8" Round to 6 x 8-1/2" Rect. Hestan P/N AKVBE8

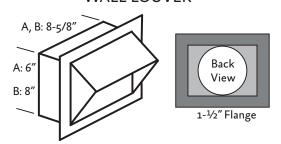
600 CFM fan module uses 8" round
300 CFM fan module uses 6" round

(Drawing Not To Scale)



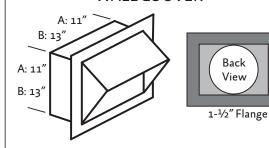
VENT ACCESSORIES

WALL LOUVER



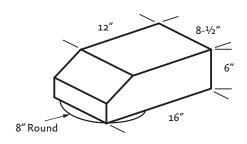
ITEM	MODEL	DESCRIPTION
Α	AKVWL6	6" Round
В	AKVWL8	8" Round

WALL LOUVER



ITEM	MODEL	DESCRIPTION
Α	AKVWL10	10" Round
В	AKVWL12	12" Round

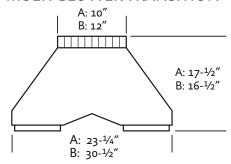
LOW PROFILE ELBOW



MODEL DESCRIPTION

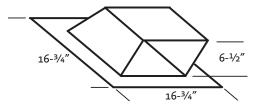
AKVBE8 8" Round to 6" x 8-1/2" Rect.

MULTI-BLOWER TRANSITION



ITEM	MODEL	DESCRIPTION
Α	AKVT6810	6" & 8" to 10"
В	AKVT8812	8" & 8" to 12"

LOW PROFILE ROOF CAP (MINIMUM 4/12 PITCH)

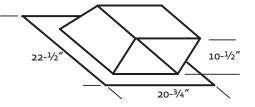


MODEL DESCRIPTION

AKVRC6HP 6" Round

AKVRC8HP 8" Round

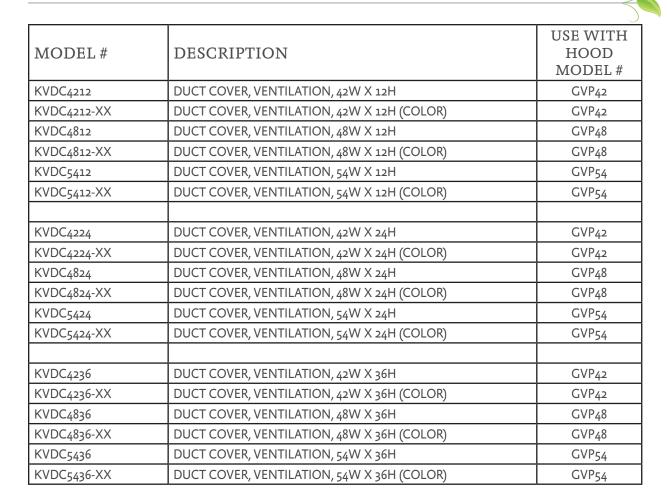
LOW PROFILE ROOF CAP (MINIMUM 4/12 PITCH)



MODEL DESCRIPTION
AKVRC10HP 10" Round
AKVRC12HP 12" Round

THE INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE AT ANY TIME WITHOUT NOTICE.

DUCT COVERS



NOTE: -XX indicates color model.

COLOR EXTENSION NUMBERS

-BK for Stealth - Black	-WH for Froth - White	-RD for Matador - Red
-YW for Sol - Yellow	-OR for Citra - Orange	-BG for Tin Roof - Burgundy
-PP for Lush - Purple	-BU for Prince - Blue	-GR for Grove - Green
-GG for Pacific Fog - Graphite Gray		-TQ for Bora Bora – Turquoise
-PK for Reef - Pink		-DB for Orion - Dark Blue



SERVICE DATA RECORD

The rating label contains the model number and serial number of the appliance. See page 4 for the location of the rating label.

Now is a good time to write this information in the space provided below. Keep your invoice for warranty validation.

Model Number	
Serial Number	
Date of Installation or Occupancy	

PARTS LIST



Please visit the Hestan website to access the parts list for your Hestan Outdoor product: www.hestanhome.com.

SERVICE



All warranty and non-warranty repairs should be performed by qualified service personnel. To locate an authorized service agent in your area, call Hestan Service Department. Before you call, please have the model number and serial number information ready.

Hestan Commercial Corporation 3375 E. La Palma Avenue Anaheim, CA 92806 (888) 905-7463

LIMITED WARRANTY



WHAT THIS LIMITED WARRANTY COVERS

Hestan Commercial Corporation ("HCC") warrants to the original consumer purchaser of a Hestan Outdoor Cooking product (the "Product") from an HCC authorized dealer that the Product is free from defective materials or workmanship for a period of two (2) years from the date of delivery to the Purchaser after the original retail purchase or closing date for new construction, whichever date is later in time ("Limited Warranty Period"). HCC agrees to repair or replace, at HCC's sole option, any part or component of the Product that fails due to defective materials or workmanship during the Limited Warranty Period. This Limited Warranty is not transferable and does not extend to anyone beyond the original consumer purchaser ("Purchaser"). This Limited Warranty is valid only on Products purchased and received from an HCC authorized dealer in the fifty United States, the District of Columbia and Canada. This Limited Warranty applies only to Products in non-commercial use and does not extend to Products used in or for any commercial applications.

LIMITED WARRANTY (CONT.)



HOW TO OBTAIN WARRANTY SERVICE

If the Product fails during the Limited Warranty Period for reasons covered by this Limited Warranty, the Purchaser must immediately contact the dealer from whom the Product was purchased or HCC at 888.905.7463.

Purchaser is responsible for making the Product reasonably accessible for service or for paying the cost to make the Product reasonably accessible for service. Service is to be provided during normal business hours of the authorized Hestan Commercial Service Provider. To the extent Purchaser requests service outside of the normal business hours of the authorized Hestan Commercial Service Provider, Purchaser will pay the difference between regular rates and overtime or premium rates. Purchaser is required to pay all travel costs for travel beyond 50 miles (one way) from the nearest authorized Hestan Commercial Service Provider.

EXTENSIONS TO TWO YEAR LIMITED WARRANTY PERIOD:

IN ADDITION TO THE TWO-YEAR LIMITED WARRANTY, THE FOLLOWING COMPONENTS HAVE EXTENDED WARRANTY COVERAGE AS SPECIFICALLY SET FORTH BELOW:

1. The Product's gas burners (excludes appearance), electric heating elements, blower motors (ventilation hoods), electronic control boards, magnetron tubes and induction generators (where applicable) are warranted to be free from defects in material and workmanship under normal non-commercial use and service for a period of five (5) years of the original Purchaser. This excludes surface corrosion, scratches, and discoloration which may occur during normal use and is limited to replacement of the defective part(s), with the Purchaser paying all other costs, including labor, shipping and handling, as applicable.

WHAT THIS LIMITED WARRANTY DOES NOT COVER:

This Limited Warranty does not cover and HCC will not be responsible for and will not pay for: damage to or defects in any Product not purchased from an HCC authorized dealer; color variations in color finishes or other cosmetic damage; failure or damage from abuse, misuse, accident, fire, natural disaster, commercial use of the Product, or loss of electrical power or gas supply to the Product; damage from alteration, improper installation, or improper operation of the Product; damage from improper or unauthorized repair or replacement of any part or component of the Product; damage from service by someone other than an authorized agent or representative of the Hestan Commercial Service Network; normal wear and tear; damage from exposure of the Product to a corrosive atmosphere containing chlorine, fluorine, or any other damaging chemicals; damage resulting from the failure to provide normal care and maintenance to the Product; damage HCC was not notified of within the Limited Warranty Period; and incidental and consequential damages caused by any defective material or workmanship.

ARBITRATION:

This Limited Warranty is governed by the Federal Arbitration Act. Any dispute between Purchaser and HCC regarding or related to the Product or to this Limited Warranty shall be resolved by binding arbitration only on an individual basis with Purchaser. Arbitration will be conducted by the American Arbitration Association ("AAA") in accordance with its Consumer Arbitration Rules or by JAMS. The arbitration hearing shall be before one arbitrator appointed by the AAA or JAMS. The arbitrator shall not conduct class arbitration and Purchaser shall not bring any claims against HCC in a representative capacity on behalf of others.

LIMITATION OF LIABILITY:

This Limited Warranty is the final, complete and exclusive agreement between HCC and Purchaser regarding the Product.

LIMITED WARRANTY (CONT.)

THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE LISTED AND DESCRIBED ABOVE. NO WARRANTIES WHETHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY AFTER THE LIMITED WARRANTY PERIOD STATED ABOVE. NO OTHER EXPRESS WARRANTY OR GUARANTY GIVEN BY ANY PERSON, FIRM OR CORPORATION WITH RESPECT TO THIS PRODUCT SHALL BE BINDING ON HCC. HCC ASSUMES NO RESPONSIBILITY THAT THE PRODUCT WILL BE FIT FOR ANY PARTICULAR PURPOSE, EXCEPT AS OTHERWISE PROVIDED BY APPLICABLE LAW.

HCC SHALL NOT BE LIABLE FOR LOSS OF REVENUE OR PROFITS, FAILURE TO REALIZE SAVINGS OR OTHER BENEFITS, OR ANY OTHER SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY THE USE, MISUSE OR INABILITY TO USE THE PRODUCT, REGARDLESS OF THE LEGAL THEORY ON WHICH THE CLAIM IS BASED, AND EVEN IF HCC HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NO RECOVERY OF ANY KIND AGAINST HCC SHALL BE GREATER IN AMOUNT THAN THE PURCHASE PRICE OF THE PRODUCT.

WITHOUT LIMITING THE FOREGOING, YOU ASSUME ALL RISK AND LIABILITY FOR LOSS, DAMAGE OR INJURY TO YOU AND YOUR PROPERTY AND TO OTHERS AND THEIR PROPERTY ARISING OUT OF THE USE, MISUSE OR INABILITY TO USE THE PRODUCT NOT CAUSED DIRECTLY BY THE NEGLIGENCE OF HCC. THIS LIMITED WARRANTY STATES YOUR EXCLUSIVE REMEDY.

No oral or written representation or commitment given by anyone, including but not limited to, an employee, representative or agent of HCC will create a warranty or in any way increase the scope of this express Limited Two Year Warranty. If there is any inconsistency between this Limited Warranty and any other agreement or statement included with or relating to the Product, this Limited Warranty shall govern. If any provision of this Limited Warranty is found invalid or unenforceable, it shall be deemed modified to the minimum extent necessary to make it enforceable and the remainder of the Limited Warranty shall remain valid and enforceable according to its terms.

INTERACTION OF LAWS WITH THIS LIMITED WARRANTY:

Some states, provinces or territories may not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. Some states, provinces or territories may provide for additional warranty rights and remedies, and the provisions contained in this Limited Warranty are not intended to limit, modify, take away from, disclaim or exclude any mandatory warranty requirements provided by states, provinces or territories, including certain implied warranties. This warranty gives you specific legal rights, and you may also have other rights which vary depending on location.

Any questions about this Limited Warranty may be directed to Hestan Commercial Corporation at (888) 905-7463