



## **Part # H/P VVT**

**Vertical Vent Kit for Bosch AquaStar Models  
GWH-1600H and GWH-1600P only**

**INSTALLATION INSTRUCTIONS for H/P VVT vent kit  
5" GALVANIZED TYPE "B" GAS VENT**

### **H/P VVT Kit Includes:**

- 1- High Wind Top**
- 1- Storm Collar**
- 1- Roof Flashing**
- 1- UL Listed Gripper/Fire stop**
- 2- 90° Elbows**
- 1- 12" Length of Vent**



Selkirk gas vent parts LISTED and produced under the Factory Inspection and Follow-up program of Underwriters' Laboratories, Inc. carry the LISTING MARK illustrated here.



**CAUTION: WEAR GLOVES WHILE HANDLING METAL PARTS TO AVOID PERSONAL INJURY. SHARP EDGES OR PROJECTIONS CAN CUT YOU.**

**WARNING**

Failure to follow the installation instructions could cause FIRE, CARBON MONOXIDE POISONING, OR DEATH. If you are unsure of installation requirements, call the Phone Number listed on the instructions, 1-800-992-8368 or visit [www.selkirkinc.com](http://www.selkirkinc.com).

**1. OVERVIEW**

The venting system must be designed and constructed so as to develop a positive flow adequate to remove flue gases to the outdoors. Consult the National Fuel Gas Code if the vent will have elbows or share venting with another natural draft appliance. The vent system must rise at least 12" off the top of the water heater before entering into a vent connector elbow. The minimum vertical gas vent height allowed is 6 feet; horizontal vent connectors and elbows are not to be considered in the total gas vent height. **Under no circumstances should the vent pipe reduce in size anywhere in the vent system. The tankless water heater requires a 6" vent when installed at elevations greater than 2000 feet.**

**2. GAS VENT DESIGNATIONS/JOINT METHOD**

These instructions describe installation of Selkirk, Type B Gas Vent Pipe and associated parts.

Model	Size	Means of Joining	Minimum Airspace Clearance
RV	5"	Integral Snap Lock Coupler	1"

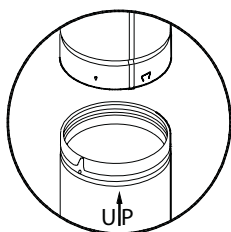


FIG. 1 RV

All joints in Selkirk gas vents must be secured using the appropriate ("Snap Lock") feature (Fig. 1). To use the Snap Lock feature, orient sections as shown in Fig. 1 and force adjacent pieces together until "SNAP" is heard, indicating full/proper joint engagement.

A new Lock-Tab® feature provides the equivalent of using a screw for this purpose since, once engaged (with finger or thumb until it bends into the groove in the top/ outlet end of the adjacent piece), it prevents the pipes from being disengaged unless the tab is pried back out and dimples aligned.

NOTE: Some local jurisdictions require a supplemental screw(s) at joints to prevent disengagement of the joint. Although not required under the terms of the UL Listing because of the integral couplers, screws are permitted to be installed at the joints. In such cases, the screws should be located approx. 1/4" from overlapped edge and must be maximum 1/4" in length so they do not pierce or deform the inner liner.

**3. TYPES OF APPLIANCES AND BUILDINGS**

Type B Gas Vents are for venting of listed (L.P. or natural) gas-burning appliances equipped with draft hoods and other Listed gas appliances specified for use with Type B gas vents. These appliances include (but are not limited to) the following types: furnaces, boilers, tankless water heaters, room heaters, unit heaters, duct furnaces, floor furnaces, and decorative appliances. **DO NOT USE Type B Gas Vent for wall furnaces "Listed" for use with Type BW Gas Vents only, incinerators and appliances Listed for use with chimneys only, combination gas-oil burning appliances, and appliances which may be**

# Round Type B Gas Vent INSTALLATION INSTRUCTIONS

converted readily to the use of solid or liquid fuels. **DO NOT USE Type B Gas Vent for Category II, III, or IV appliances, or for any gas-burning appliance which requires either a pressure-tight or liquid-tight venting system.**

Selkirk Type B Gas Vent may be used in single and multistory buildings. Type B Gas Vent may be used for both individual and multiple appliance venting. Selkirk Type B Gas Vents are to be installed and used in accordance with the "National Fuel Gas Code", NFPA 54, the "Standard for Chimneys, Fireplace and Venting Systems", NFPA 221, the "International Fuel Gas Code" and/or applicable local/regional codes. Selkirk Type B Gas Vent is also suitable for use in existing, otherwise unused and new masonry chimneys to protect the chimney from damaging effects of moist combustion products from the appliances listed above. **NEVER USE Selkirk Type B Gas Vent on any appliance that is not listed and approved for venting with Type B gas vent.**

A NOTICE SHOULD BE POSTED near the point where the Gas Vent is connected to the appliance, with the following wording: "Connect this Gas Vent only to gas burning appliances, as indicated in the installation instructions. Do not connect to incinerators, or liquid or solid fuel burning appliances".

**4. COMBUSTION AIR SUPPLY**

The tankless water heater must have an adequate air supply for combustion, vent operation, and ventilation. Special provisions for bringing in outside air may be necessary in tight buildings or when appliances are in small rooms. Consult local building codes, NFPA 54, "National Fuel Gas Code" and the water heater installation manual for combustion air supply requirements. Failure to supply adequate combustion air to the water heater and all other fuel burning appliances in the structure can cause a negative draft in the exhaust vent. This creates a serious health hazard from carbon monoxide poisoning. In addition, if the negative draft coming down the vent pipe is freezing cold air, it could potentially freeze the piping inside the water heater. Damage from freezing is not covered under the tankless water heater warranty.

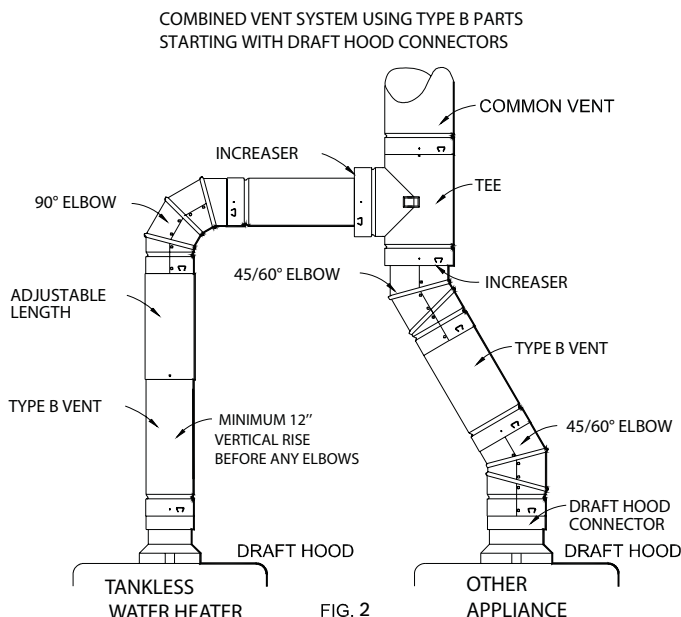


FIG. 2

**5. VENT CONNECTOR TYPE AND SIZE (See Fig. 2.)**

Selkirk Gas Vent pipe meets all building code and safety standards for use as gas appliance vent connectors. Correct selection of connector and vent size is detailed in the Selkirk Metalbestos Gas Vent and Chimney Sizing Handbook, the "National Fuel Gas Code" (NFPA 54), and local/regional codes.

## 6. VENT LOCATION

Selkirk Type B Gas Vents are recommended to be installed within the heated portion of the structure.

## 7. CLEARANCES AND ENCLOSURES

Selkirk Type B Gas Vents must be installed with ONE INCH MINIMUM AIR SPACE CLEARANCE TO COMBUSTIBLES! This clearance is marked on all gas carrying items. They apply to indoor or outdoor vents whether they are horizontal or vertical, or pass through floors, walls, roofs or framed spaces. The appropriate clearance must be observed to joists, studs, subfloors, plywood, drywall, or plaster enclosures, insulating sheathing, rafters, roofing, and any other materials classed as combustible. KEEP ELECTRICAL WIRES AND BUILDING INSULATION AWAY FROM GAS VENT AND OUT OF THE REQUIRED AIR SPACE!

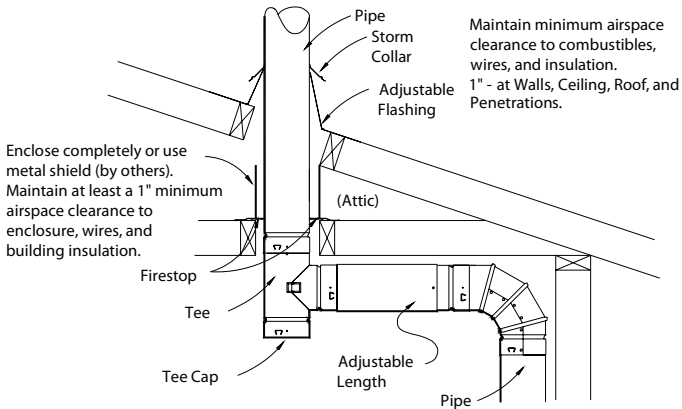


FIG. 3 - TYPICAL CEILING AND ROOF PENETRATIONS

## 8. FIRE STOPPING

All Type B Gas Vents passing through floors, ceilings or walls must be firestopped using 26 gauge or heavier galvanized steel. (See Fig. 4 and 6) The fire stop must close the area between the outer wall of the pipe and the opening in the structure. In areas such as attics with no floor, the fire stop should be placed on top of a properly framed opening. KEEP WIRES AND INSULATION OUT OF REQUIRED AIR SPACE AROUND GAS VENT.

Fire stops may be used as vent pipe supports. See Section 11. For gas vents within a shaft or chase, firestopping is provided by the vertical walls of the shaft. Any openings in the chase/ shaft below the roof must be firestopped.

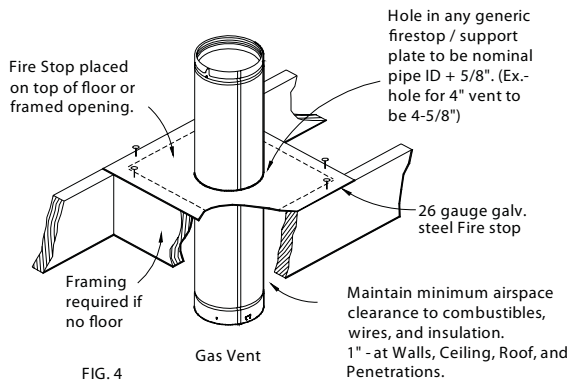


FIG. 4  
FIRE STOPPING REQUIRED FOR ALL  
CEILING/FLOOR PENETRATIONS

## 9. USE OF GAS VENT FITTINGS (See Fig. 3.)

Do not cut gas vent pipe or fittings. Adjustable lengths are telescoped over fixed lengths, to accommodate odd distances between vent lengths or connectors. An adjustable length suspended below a support serves as an expansion joint between two fixed points of properly supported gas vent. Ordinarily, the adjustable length must be secured, but for expansion joints it should just maintain good contact and a minimum 1-1/2" overlap. DO NOT USE adjustable lengths to suspend any weight of pipe below.

Elbows are fully adjustable.

Selkirk tees, elbows, increasers, and short lengths are specially designed to facilitate interconnections.

Tees used to start vertical vents must use a tee cap to prevent air leakage. All unused openings in a gas vent must be sealed to prevent loss of effective vent action.

## 10. MINIMUM GAS VENT HEIGHT

A minimum gas vent height of 6 feet above the appliance draft hood is required. Where the vent has an offset, or serves multiple appliances, greater heights may be required for proper venting. Refer to appliance manufacturer instructions and local codes for required minimum heights.

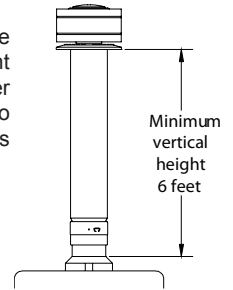


FIG. 5 - MINIMUM  
VERTICAL HEIGHT

## 11. SUPPORT - PRIMARY AND OFFSETS

Gas vent piping must be securely supported. Lateral runs are to be supported at least every 5 feet. Indoors, gas vent may be supported and firestopped using the "Quick Grip" Support Assembly. At the desired location, cut a square or circular hole in the floor at a minimum of 2 1/2 inches larger than the nominal pipe size, but not greater than 4 inches larger. This will provide the REQUIRED 1-INCH CLEARANCE FROM COMBUSTIBLES. Place the support over the hole with the ring down. Use an 8 penny nail or self drilling sheet metal screw in each corner at least 3/8 of an inch in from the edge. Pipe should be inserted from below. A maximum of 30 feet of pipe may be installed above the support before resupport is required.

Table (Support Hole Dimensions)

Nominal Pipe Size (inches)	Min. Hole Size (inches)	Max. Hole Size (inches)
3	5.5	7
4	6.5	8
5	7.5	9
6	8.5	10

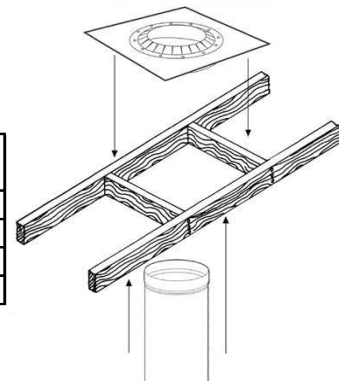


FIG. 6 FIRESTOP/SUPPORT ASSEMBLY

Tees used as vent inlets may be supported by sheet metal plates or brackets. Plumbers tape may be used to support both horizontal and vertical piping. Short vents with less than 6 feet of vertical pipe below the flashing may be suspended from the flashing. (The pipe may be supported by the storm collar resting on the top of the flashing.) Use 1/4 inch long sheet metal screws to attach the storm collar to the pipe at the appropriate place. Gas vents supported only by the flashing must be guyed above the roof to withstand snow and wind loads. All gas vents extending above the roof more than 5 feet must be securely guyed or braced. When offsets are necessary, adequate support above and below the offset is required. In addition, securing the offset elbow with three maximum 1/4" long sheet metal screws is recommended.

## 12. FLASHING

The roof opening must be located and sized such that the vent is vertical and has the required air space clearance. The Tall Cone Flashing is for flat roofs only (See Fig. 7-A). It is nailed in place through all four sides of the base flange. The Adjustable Roof Flashing (See Fig. 7-B) is positioned with the lower portion of the base flange over roofing material and the upper portion of the base flange under the roofing material. Nail through only the upper portion and sides of the base flange. (DO NOT nail through lower flange.) Use nails with a neoprene washer, or cover the nail heads with a silicone sealant. Finish roofing around the flashing, covering the sides and upper areas of the flange with roofing material.

## 13. VENT TERMINATION

Gas vent piping must extend through the flashing to a height above the roof as shown below. A storm collar is installed on the vent pipe over the opening between pipe and flashing. Silicone sealant is used over the joint between pipe and storm collar. The top is securely attached to the gas vent using the proper method. (See section 14.)

The top is suitable for installation on listed gas vents terminating a sufficient distance from the roof so that no discharge opening is less than 2 feet horizontally from the roof surface, and the lowest discharge opening will be no closer than the minimum height specified in Fig. 8-B. These minimum heights may be used provided that the vent is not less than 8 feet from any vertical wall.

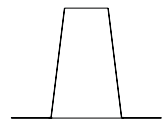


FIG. 7-A  
TALL CONE FLASHING  
FOR FLAT ROOFS ONLY

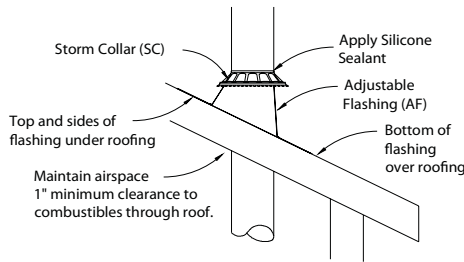


FIG. 7-B  
ELEMENTS FOR PROPER ROOF FLASHING INSTALLATION

These rules were established on the basis of tests conducted in accordance with American National Standard ANSI/UL 441.

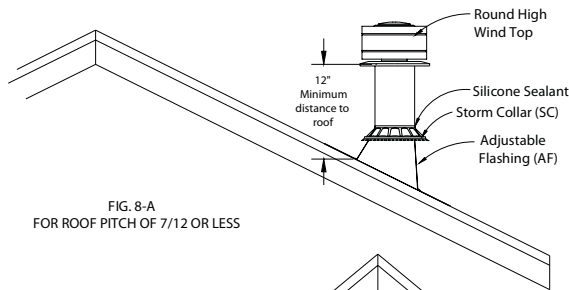


FIG. 8-A  
FOR ROOF PITCH OF 7/12 OR LESS

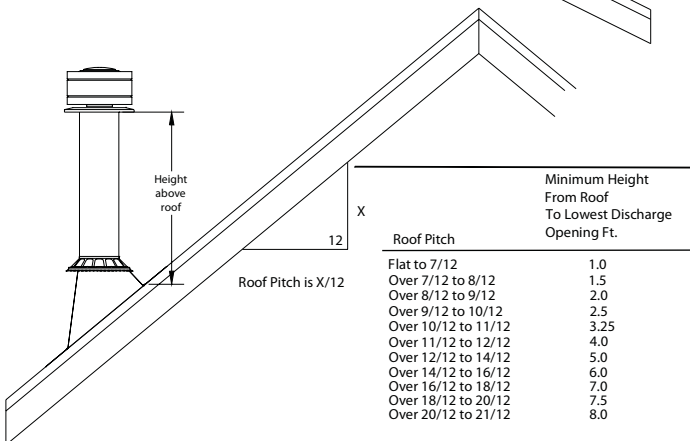


FIG. 8-B  
LOCATION RULES FOR FLAT TO 21/12 PITCH

## 14. TOP INSTALLATION

Selkirk Round High Wind Tops have a spring clip which engages and locks automatically when the top is pushed into the upper end of the pipe. (See Fig. 9.) To remove the top, pull up evenly on opposite sides of the skirt of the top.

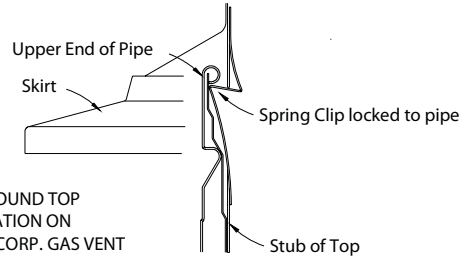


FIG. 9 - ROUND TOP  
INSTALLATION ON  
SELKIRK CORP. GAS VENT

TOP INSTALLATION

## 15. CHECKING VENT OPERATION

Complete all gas piping, electrical, and vent connections. After adjusting the appliance and lighting the main burner, allow a couple of minutes for warm-up. Hold an extinguished match by the specified points on the draft hood (see Fig. 10). Proper venting will draw the flame toward or into the draft hood. Improper venting, indicated by escape or spillage of burned gas, will cause match to flicker or go out. Smoke from a candle will also be pulled into the draft hood if the vent is drawing properly and flow away if not.

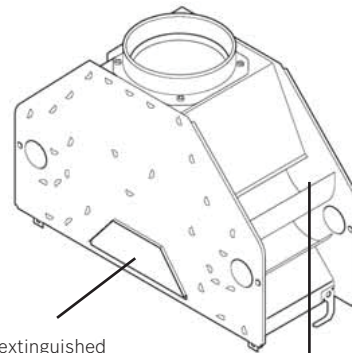


Fig. 10 Water Heater Draft Hood  
(Vent piping not shown)

## 16. PAINTING

To prolong the life and appearance of the galvanized steel outer casing and other parts of Selkirk Gas Vents located outdoors, use proper painting procedure at time of installation. Remove oil and dirt with a solvent. Paint first with a good quality zinc primer or other primer recommended for use on galvanized steel. Next apply an appropriate finish coat. Ordinary house paints applied directly to galvanized steel may not adhere well and do not prevent underfilm corrosion which leads to paint loosening and peeling.

These instructions must be observed when installing Selkirk Gas Vents. Engineering methods for design and sizing of all Selkirk Gas Vents are provided in the "Selkirk Metalbestos Gas Vent and Chimney Sizing Handbook". Following these methods will assure safe and complete removal of combustion products.

## LIFETIME WARRANTY

**LIMITED LIFETIME WARRANTY:** "Selkirk Corporation" ("Selkirk", "we", "us", "our") warrants to the original purchaser/consumer that Metalbestos Model; SSII, DS Smoke, SGPlus, VP Type L Vent, Type B Vent, SW, DWC and SWC products are free from defects in material and workmanship for the life of the product when properly connected to an appliance listed by an accredited safety certification agency and installed in accordance with our installation instructions and specifications.

For products installed after January 1, 2000, for a period of Ten (10) years from original installation, we will provide replacement product to the original consumer for the product proven defective with a similar or like quantity of available Selkirk Corporation product, free of charge.

From the Eleventh (11) through Fifteenth (15) years we will provide replacement product to the original consumer at a cost of 75% off the published Retail Price in effect on the date the claim is received.

At expiration of the Fifteen (15) year term, we will provide replacement product to the original consumer at a cost of 50% off the published Retail Price in effect on the date the claim is received.

**WARNING: FAILURE TO INSTALL SELKIRK PRODUCTS ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS WILL VOID ALL APPLICABLE WARRANTIES AND MAY RESULT IN FIRE, CARBON MONOXIDE POISONING OR DEATH. SEE OUR SELKIRK PRODUCTS INSTALLATION INSTRUCTIONS FOR COMPLETE INSTRUCTIONS. Call 800-992-8368 for a free copy.**

**WE DO NOT GUARANTEE OR IN ANY WAY WARRANT THE INSTALLATION OF SELKIRK PRODUCTS DUE TO THE WIDE VARIANCE IN INSTALLATION PRACTICES AND OTHER CONDITIONS BEYOND OUR CONTROL.**

**THIS LIMITED WARRANTY DOES NOT COVER:**

- (a) costs (labor or otherwise) associated with either removing a previously installed product, installing a replacement product, transportation or return of a product, or transportation of replacement product;
- (b) damage to the finish of products caused by the use of improper solvents/chemicals or improper cleaning methods;
- (c) damage resulting from failure to reasonably clean, care for or maintain products in accordance with our installation instructions/recommendations;

(d) damage (to products, appliances or structure) based on or resulting from improper installation or repair, misuse or abuse (including, but not limited to, excessive or improper operating condition), or alteration or adjustments other than in conformity without installation instructions and specifications,

whether performed by a contractor service company, technician, or yourself;

(e) any products that have been moved from their original installation site;

(f) damage resulting when driftwood, garbage, or any other prohibitive material

has been burned in the appliance served by the chimney;

(g) damage to your chimney that results from accidents such as fire, flood, high winds "acts of God", or any other contingency beyond our control.

**CLAIM PROCEDURE:** If you believe that a product fails to meet the above limited warranty, notify us in writing at the following location:

SELKIRK, CORP. Attn: WARRANTY CLAIMS DEPARTMENT  
1301 W. Pres George Bush Hwy, Richardson, TX 75080  
Fax: (877) 393-4145 Ph: (800) 992-8368

Notification should include a description of the product, model and part number and how the product fails to meet the above warranty. Upon receipt of a written claim under this limited warranty and evidence of the date of purchase or installation, at our option and in our sole discretion, we will either repair or replace the product with similar or like quantity of available Selkirk product per this warranty. Selkirk reserves the right to inspect or investigate any warranty claims prior to determining whether to repair or replace a product. If, as determined by Selkirk repair or replacement if the product is not commercially practicable or cannot be completed in a timely manner, we may refund the prorated purchase price paid for the product upon verification by providing a copy of your invoice, receipt of bill of sale.

**ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED IN DURATION TO THE WARRANTY PERIOD SPECIFIED ABOVE. WE DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES AND ANY LOSS OR EXPENSE(S), NOT SPECIFIED ABOVE. SOME STATES MAY NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE EXCLUSIONS OR LIMITATIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE LEGAL RIGHTS WHICH VARY FROM STATE TO STATE.**

Metalbestos is the world's largest manufacturer of venting products and we back up our superior design with a Lifetime of security. Visit our web site at [www.selkirkinc.com](http://www.selkirkinc.com) to find out more about our complete product offering.

Please copy, fax or mail this form to:

Selkirk Corp. 1301 W. Pres. George Bush Hwy. Suite #330  
Richardson, Texas 75080 USA Fax: 1-877-393-4145

NAME \_\_\_\_\_

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

INSTALLATION DATE \_\_\_\_\_

PRODUCT TYPE  SSII  DS SMOKE  SGPlus  DWC  SWC  
 VP Type L Vent  Type B Gas Vent  SW  SWII

TYPE OF INSTALLATION  VERTICAL  THRU-THE-WALL

LOCATED IN  HOME  VACATION HOME  OTHER

TYPE OF LISTED APPLIANCE CONNECTED TO \_\_\_\_\_



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