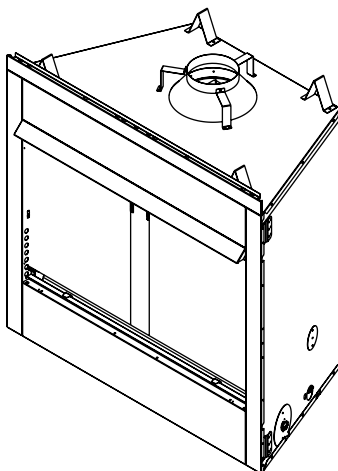


**Models:**  
RBV4236IH  
RBV4236IT  
RBV4842IH  
RBV4842IT  
**B-Vent Gas Appliance**



**CAUTION**

**DO NOT DISCARD THIS MANUAL**

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.



**⚠ WARNING**

**If the information in these instructions is not followed exactly, a fire 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.
- **What to do if you smell gas:**
  - Do not try to light any appliance.
  - Do not touch any electrical switch. Do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency, or the gas supplier.



**⚠ WARNING**

**HOT! DO NOT TOUCH. SEVERE BURNS MAY RESULT. CLOTHING IGNITION MAY RESULT.**



Glass and other surfaces are hot during operation and cool down.

- Keep children away.
- CAREFULLY SUPERVISE children in same room as appliance.
- Alert children and adults to hazards of high temperatures.
- Do NOT operate with protective barriers removed or door open.
- Keep clothing, furniture, draperies and other combustibles away.

In the Commonwealth of Massachusetts:

- installation must be performed by a licensed plumber or gas fitter.
- a CO detector shall be installed in the room where the appliance is installed.



Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies suggests NFI certified or factory-trained professionals, or technicians supervised by an NFI certified professional.



This appliance may be installed as an OEM installation in manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the manufactured home construction and safety standard, **Title 24 CFR, Part 3280** or **Standard for Installation in Mobile Homes, CAN/CSA Z240MH**.

*This appliance is only for use with the type(s) of gas indicated on the rating plate.*

**Read this manual before installing or operating this appliance.  
Please retain this owner's manual for future reference.**

### ***Congratulations***

Congratulations on selecting a Heatilator gas appliance—an elegant and clean alternative to wood burning appliances. The Heatilator gas appliance you have selected is designed to provide the utmost in safety, reliability, and efficiency.

As the owner of a new appliance, you'll want to read and carefully follow all of the instructions contained in this owner's manual. Pay special attention to all cautions and warnings.

This owner's manual should be retained for future reference. We suggest you keep it with your other important documents and product manuals.

The information contained in this owner's manual, unless noted otherwise, applies to all models and gas control systems.

Your new Heatilator gas appliance will give you years of durable use and trouble-free enjoyment. Welcome to the Heatilator family of appliance products!

### **Homeowner Reference Information**

*We recommend that you record the following pertinent information about your appliance:*

Model Name: \_\_\_\_\_ Date purchased/installed: \_\_\_\_\_

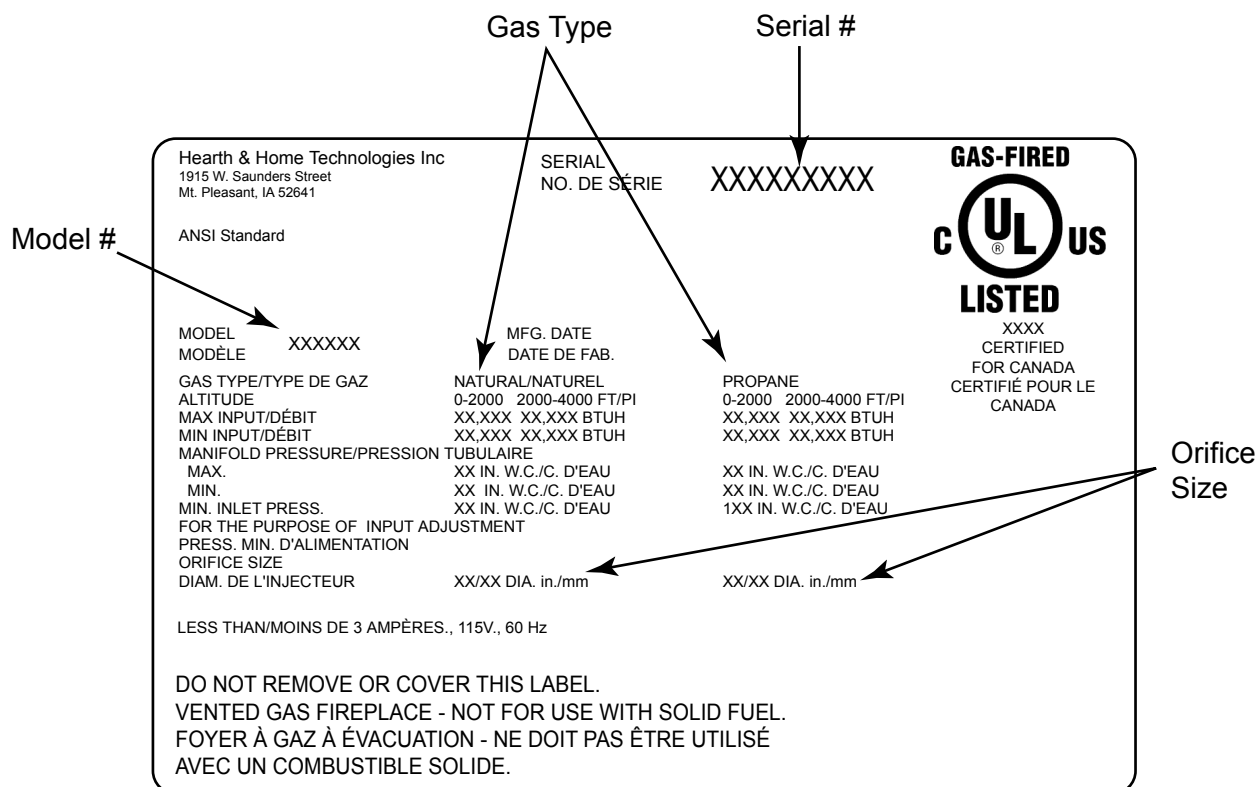
Serial Number: \_\_\_\_\_ Location on appliance: \_\_\_\_\_

Dealership purchased from: \_\_\_\_\_ Dealer phone: \_\_\_\_\_

Notes: \_\_\_\_\_

### **Listing Label Information/Location**

The model information regarding your specific appliance can be found on the rating plate located in the control area of the appliance.



# Table of Contents

<b>1 Listing and Code Approvals</b>	<b>4</b>	<b>10 Electrical Information</b>	<b>21</b>
A. Appliance Certification . . . . .	4	A. Recommendation for Wire . . . . .	21
B. Glass Specifications . . . . .	4	B. Connecting to the Appliance . . . . .	21
C. BTU Specifications . . . . .	4	C. Intellifire Ignition System Wiring . . . . .	22
D. High Altitude Installations . . . . .	4	D. Junction Box Installation . . . . .	23
E. Non-Combustible Materials . . . . .	4		
F. Combustible Materials . . . . .	4	<b>11 Finishing</b>	<b>24</b>
<b>2 Getting Started</b>	<b>5</b>	A. Mantel Projections . . . . .	24
A. Design and Installation Considerations . . . . .	5	B. Facing Material . . . . .	24
B. Negative Pressure . . . . .	6		
C. Tools and Supplies Needed . . . . .	7	<b>12 Appliance Setup</b>	<b>25</b>
D. Inspect the Appliance and Components . . . . .	7	A. Remove the Shipping Materials . . . . .	25
<b>3 Framing and Clearances</b>	<b>8</b>	B. Clean the Appliance . . . . .	25
A. Select Appliance Location . . . . .	8	C. Accessories . . . . .	25
B. Construct the Appliance Chase . . . . .	9	D. Log Assembly . . . . .	25
C. Clearances . . . . .	10	E. Lava Rock, Vermiculite, Rockwool Placement . . . . .	26
D. Mantel Projections . . . . .	11	F. Log Removal/Replacement . . . . .	27
<b>4 Termination Locations</b>	<b>12</b>	G. Glass Doors . . . . .	28
A. Vent Termination Minimum Clearances . . . . .	12	H. Hood . . . . .	28
<b>5 Vent Information and Diagrams</b>	<b>13</b>	I. Air Shutter Setting . . . . .	29
A. Vent Guidelines . . . . .	13		
B. Vent System Configuration . . . . .	13	<b>13 Operating Instructions</b>	<b>30</b>
<b>6 Vent Clearances and Framing</b>	<b>15</b>	A. Before Operating This Appliance . . . . .	30
A. Pipe Clearances to Combustibles . . . . .	15	B. Check Appliance Draft . . . . .	31
B. Wall Penetration Framing . . . . .	15	C. High Limit Safety Switch . . . . .	31
C. Vertical Penetration Framing . . . . .	15	D. Lighting the Appliance . . . . .	32
<b>7 Appliance Preparation</b>	<b>16</b>	E. After the Appliance is Lit . . . . .	33
A. Installing Outside Air Kit . . . . .	16	F. Frequently Asked Questions . . . . .	33
B. Gas and Electrical Connections . . . . .	17		
C. Securing and Leveling Appliance . . . . .	17	<b>14 Troubleshooting</b>	<b>34</b>
<b>8 Installing Vent Pipe</b>	<b>18</b>	<b>15 Maintaining and Servicing the Appliance</b>	<b>36</b>
A. Assemble Vent Sections . . . . .	18	<b>16 Reference Materials</b>	<b>38</b>
B. Attach Vent to Firebox Assembly . . . . .	18	A. Appliance Dimension Diagram . . . . .	38
C. Securing Vent Sections . . . . .	18	B. Service Parts List . . . . .	40
<b>9 Gas Information</b>	<b>19</b>	C. Optional Components . . . . .	46
A. Fuel Conversion . . . . .	19	D. Limited Lifetime Warranty . . . . .	47
B. Gas Pressure . . . . .	19	E. Contact Information . . . . .	48
C. Gas Connection . . . . .	19		
D. High Altitude Installations . . . . .	20		

**Note:** An arrow (➡) found in the text signifies change in content.

# 1 Listing and Code Approvals

## A. Appliance Certification

**MODELS:** RBV4236/RBV4842 Series  
**LABORATORY:** Underwriters Laboratories, Inc. (UL)  
**TYPE:** B-Vent Gas Appliance  
**STANDARD:** **ANSI Z21.50b-2005/CSA 2.22b-2005**

This product is listed to ANSI standards for “Vented Gas Fireplaces” and “Gas Fired Appliances for Use at High Altitudes”.

This model (natural gas and propane) can be installed in a bedroom (in the United States) which has a total volume of unconfined space appropriate to the particular installation. Refer to the **National Fuel Gas Code ANSI Z223.1/NFPA54 (current edition)**, **The Uniform Mechanical Code - (current edition)**, and local building officials for the options allowed in obtaining an effective bedroom volume of unconfined space.

This model (natural gas and propane) can be installed in a bedroom (in Canada) if a thermostat is installed with the appliance. Consult local code authorities.

**NOT INTENDED FOR USE AS A PRIMARY HEAT SOURCE.** This appliance is tested and approved as either supplemental room heat or as a decorative appliance. It should not be factored as primary heat in residential heating calculations.

## B. Glass Specifications

Hearth & Home Technologies appliances manufactured with tempered glass may be installed in hazardous locations such as bathtub enclosures as defined by the Consumer Product Safety Commission (CPSC). The tempered glass has been tested and certified to the requirements of **ANSI Z97.1** and **CPSC 16 CFR 1202** (Safety Glazing Certification Council **SGCC# 1595** and **1597**. Architectural Testing, Inc. Reports **02-31919.01** and **02-31917.01**).

This statement is in compliance with **CPSC 16 CFR Section 1201.5** “Certification and labeling requirements” which refers to **15 U.S. Code (USC) 2063** stating “...Such certificate shall accompany the product or shall otherwise be furnished to any distributor or retailer to whom the product is delivered.”

Some local building codes require the use of tempered glass with permanent marking in such locations. Glass meeting this requirement is available from the factory. Please contact your dealer or distributor to order.

**Note:** Glass doors are **not** optional in the Commonwealth of Massachusetts. They are required.

**Note:** This installation must conform with local codes. In the absence of local codes you must comply with the **National Fuel Gas Code, ANSI Z223.1-latest edition** in the U.S.A. and the **CAN/CGA B149 Installation Codes** in Canada.

## C. BTU Specifications

Reveal Series	RBV4236	RBV4842
IPI		
Input Rate (NG)	40,000 BTUH	43,000 BTUH
Orifice Size (NG)	#31/3.05 mm	.125 in./3.18 mm
Input Rate (LP)	38,000 BTUH	41,000 BTUH
Orifice Size (LP)	#49/1.85 mm	#48/1.93 mm

## D. High Altitude Installations

U.L. Listed gas appliances are tested and approved without requiring changes for elevations from 0 to 2000 feet in the U.S.A. and Canada.

When installing this appliance at an elevation above 2000 ft, it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Input rate should be reduced by 4% for each 1000 ft above a 2000 ft elevation in the U.S.A., or 10% for elevations between 2000 and 4500 ft in Canada. If the heating value of the gas has been reduced, these rules do not apply. To identify the proper orifice size, check with the local gas utility.

If installing this appliance at an elevation above 4500 ft (in Canada), check with local authorities.

## WARNING

Do NOT use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

## E. Non-Combustible Materials

Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof.

Materials that are reported as passing **ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750° C**, shall be considered non-combustible materials.

## F. Combustible Materials

Materials made of or surfaced with wood, compressed paper, plant fibers, plastics, or other material that can ignite and burn, whether flame proofed or not, or whether plastered or unplastered shall be considered combustible materials.

## 2 Getting Started

### A. Design and Installation Considerations

Heatilator B-vent gas appliances are designed to operate with all exhaust gases expelled to the outside of the building, and combustion air pulled from the room.

#### CAUTION

Check building codes prior to installation.

- Installation **MUST** comply with local, regional, state and national codes and regulations.
- Consult insurance carrier, local building, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.

When planning an appliance installation, it's necessary to determine the following information before installing:

- Where the appliance is to be installed. **See Section 3.**
- The vent system configuration to be used. **See Sections 4 and 5.**
- Gas supply piping. **See Section 9.**
- Electrical wiring. **See Section 10.**
- Framing and finishing details. **See Sections 3, 6 and 11.**
- Whether optional accessories—devices such as a fan, wall switch, or remote control—are desired. **See Section 10.**




#### WARNING

Keep appliance dry.

- Mold or rust may cause odors.
- Water may damage controls.



## B. Negative Pressure

<b>⚠ WARNING</b>	
	<b>Asphyxiation Risk</b> <ul style="list-style-type: none"><li>• Negative pressure can cause spillage of combustion fumes and soot.</li><li>• Fire needs to draft properly for safe operation.</li></ul>

Draft is the pressure difference needed to vent fireplaces successfully. Considerations for successful draft include:

- Preventing negative pressure.
- Location of fireplace and chimney.

### Negative Pressure

Negative pressure results from the imbalance of air available for the fireplace to operate properly. Causes for this imbalance include:

- Exhaust fans (kitchen, bath, etc.).
- Range hoods.
- Combustion air requirements for furnaces, water heaters and other combustion appliances.
- Clothes dryers.
- Location of return-air vents to furnace or air conditioning.
- Imbalances of the HVAC air handling system.
- Upper level air leaks (recessed lighting, attic hatch opening, duct leaks).

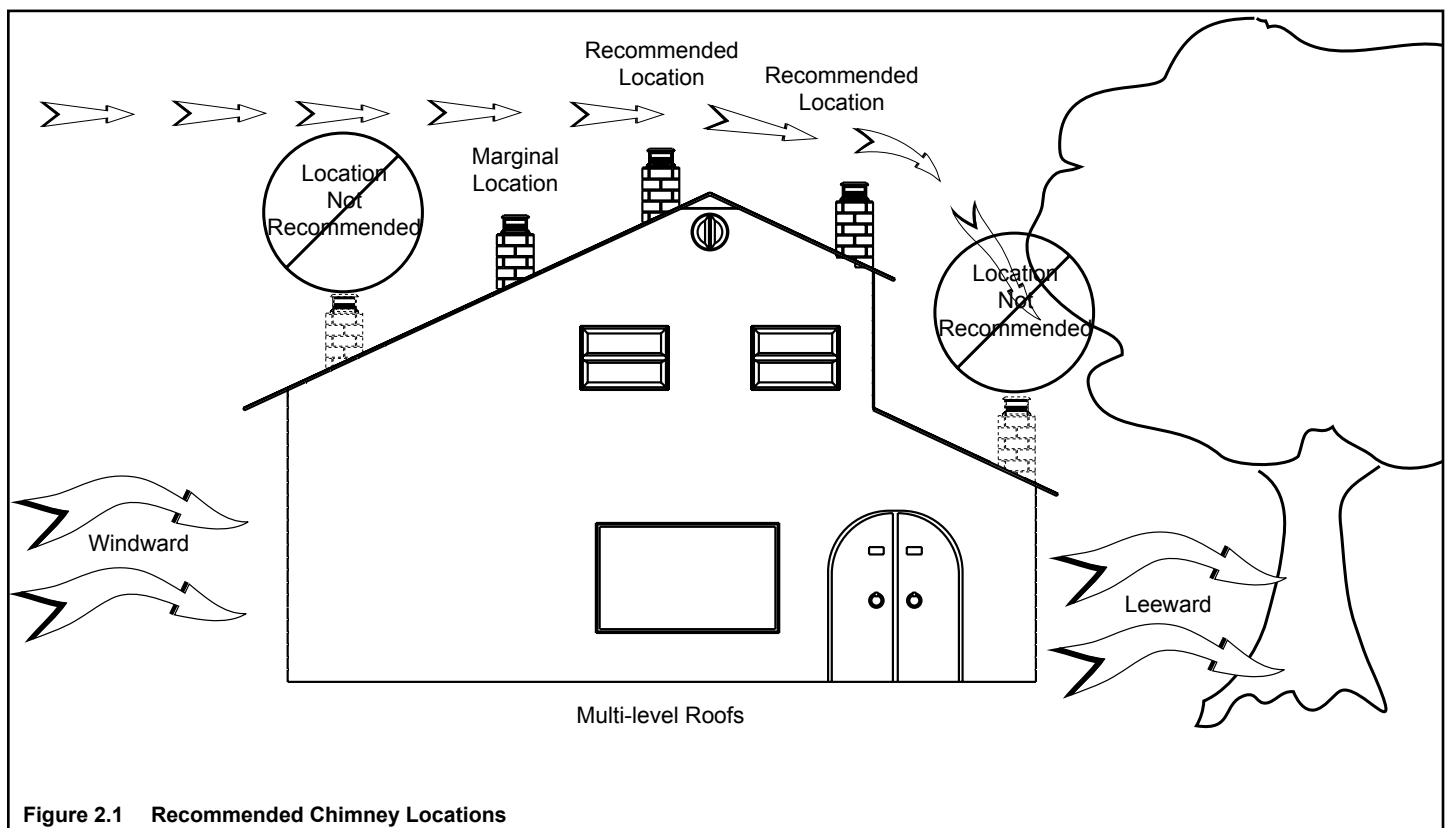
To minimize the effects of negative air pressure, the following must be considered:

- Install the outside air kit. Install the intake on the side of the house towards prevailing winds during the heating season.
- Ensure adequate outdoor air is supplied for combustion appliances and exhaust equipment.
- Ensure furnace and air conditioning return vents are not located in the immediate vicinity of the fireplace.
- Avoid installing the fireplace near doors, walkways or small isolated spaces.
- Recessed lighting should be a “sealed can” design; attic hatches weather stripped or sealed; attic mounted duct work and air handler joints and seams taped or sealed.
- Basement installations should be avoided due to stack effect. Stack effect creates negative pressure in lower levels. Hearth & Home Technologies recommends the use of direct vent fireplaces in basements.

Location of the fireplace and chimney will affect performance. As shown in Figure 2.1 the chimney should:

- Be installed through the warm airspace enclosed by the building envelope. This helps to produce more draft, especially during lighting and die-down of the fire.
- Penetrate the highest part of the roof. This minimizes the effects of wind turbulence.
- Be located away from trees, adjacent structures, uneven roof lines and other obstructions.

Offsets can restrict draft so their use should be minimized. Consider the fireplace location relative to floor and ceiling and attic joists.





## C. Tools and Supplies Needed

Before beginning the installation be sure that the following tools and building supplies are available.

Reciprocating saw	Framing material
Pliers	Hi temp caulking material
Hammer	Gloves
Phillips screwdriver	Framing square
Flat blade screwdriver	Electric drill and bits (1/4 in.)
Plumb line	Safety glasses
Level	Manometer
Voltmeter	Tape measure
Non-corrosive leak check solution	
1/2 - 3/4 in. length, #6 or #8 Self-drilling screws	
One 1/4 in. female connection (for optional fan)	

## D. Inspect the Appliance and Components



**⚠ WARNING**

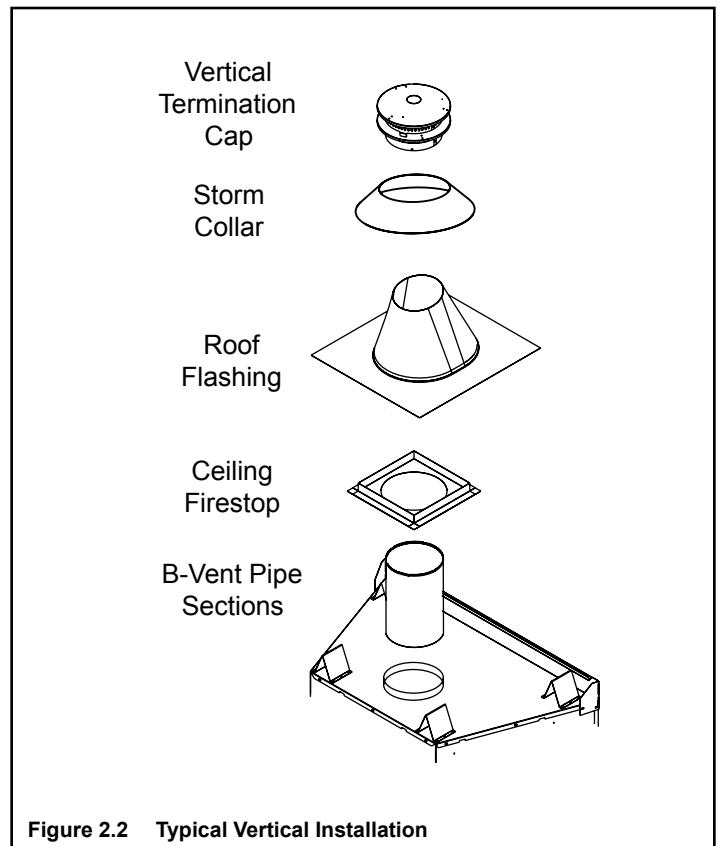
Inspect appliance and components for damage. Damaged parts may impair safe operation.


- Do NOT install damaged components.
- Do NOT install incomplete components.
- Do NOT install substitute components.

Report damaged parts to dealer.

The following B-vent components are needed for installation. See Figure 2.2.

- Appliance
- Pipe components
- Firestops
- Attic insulation shield
- Elbows
- Strapping
- Roof flashing or chase top
- Termination cap
- Storm Collar
- Carefully remove the appliance and components from the packaging.
- The vent system components and trim doors are shipped in separate packages.
- The gas logs may be packaged separately and must be field installed.
- Report to your dealer any parts damaged in shipment, particularly the condition of the glass.
- **Read all of the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.**





**⚠ WARNING**

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:


- Installation and use of any damaged appliance or vent system component.
- Modification of the appliance or vent system.
- Installation other than as instructed by Hearth & Home Technologies.
- Improper positioning of the gas logs or the glass door.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

**Any such action may cause a fire hazard.**

# 3 Framing and Clearances

## Note:

- Illustrations reflect typical installations and are FOR DESIGN PURPOSES ONLY.
- Illustrations/diagrams are not drawn to scale.
- Actual installation may vary due to individual design preference.



### WARNING

**Fire Risk**  
Provide adequate clearance:  

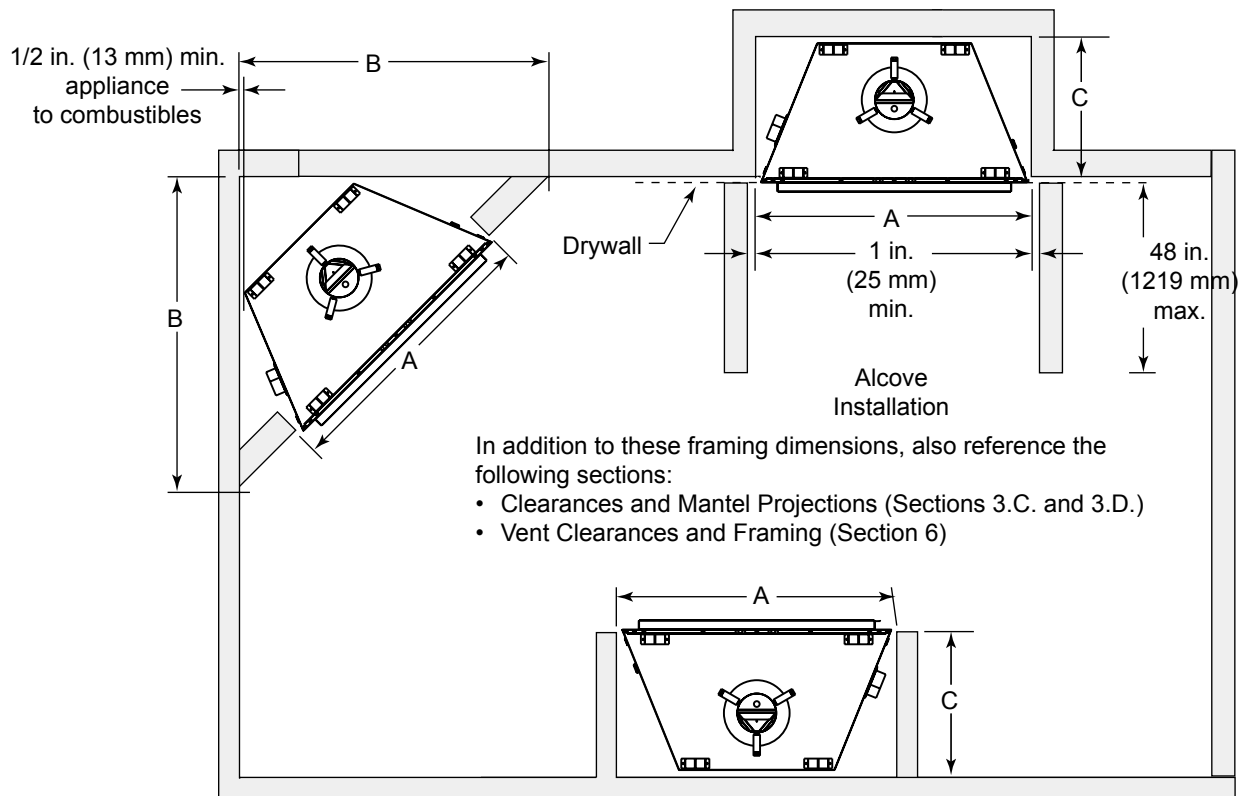
- Around air openings.
- For service access.

Locate appliance away from traffic areas.

## A. Select Appliance Location

When selecting a location for your appliance it is important to consider the required clearances to walls (See Figure 3.1).

**Note:** For actual appliance dimensions refer to Section 16.



Model #		A	B	C
RBV4236	in.	42	48	22
	mm	1067	1219	559
RBV4842	in.	48	51-1/4	22
	mm	1219	1327	559

Figure 3.1 Appliance Locations



## B. Construct the Appliance Chase

A chase is a vertical boxlike structure built to enclose the gas appliance and/or its vent system. Vertical vents that run on the outside of a building may be, but are not required to be, installed inside a chase.

Construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Local building codes **MUST** be checked.

Chases should be constructed in the manner of all outside walls of the home to prevent cold air drafting problems. The chase should not break the outside building envelope in any manner.

Walls, ceiling, base plate and cantilever floor of the chase should be insulated. Vapor and air infiltration barriers should be installed in the chase as per regional codes for the rest of the home. Additionally, Hearth & Home Technologies recommends that the inside surfaces be sheetrocked and taped (or the use of an equivalent method) for maximum air tightness.

To further prevent drafts, gas line holes and other openings should be caulked with high temperature caulk or stuffed with unfaced insulation. If the appliance is being installed on a cement slab, we recommend that a layer of plywood be placed underneath to prevent conducting cold up into the room.



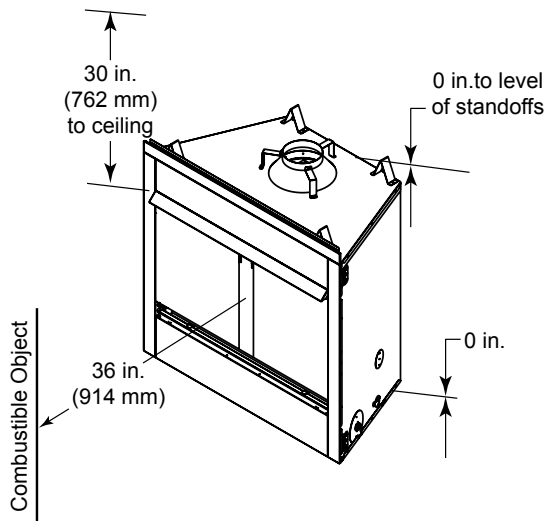
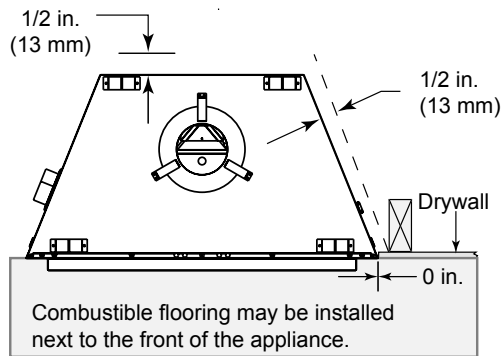
### **WARNING**

#### **Fire Risk**

- Construct chase to all clearance specifications in manual.
- Locate and install appliance to all clearance specifications in manual.

## C. Clearances

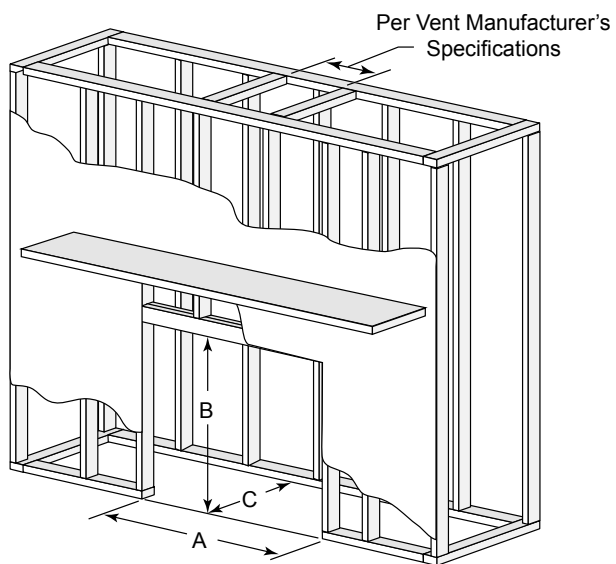
➔ **Note:** If the inside of the framed cavity is to be finished, the framing dimensions **must** include the finished surface. If drywall is to be attached to the rear wall, the depth must be measured from the drywall surface.



### WARNING

**Fire Risk**  
**Odor Risk**

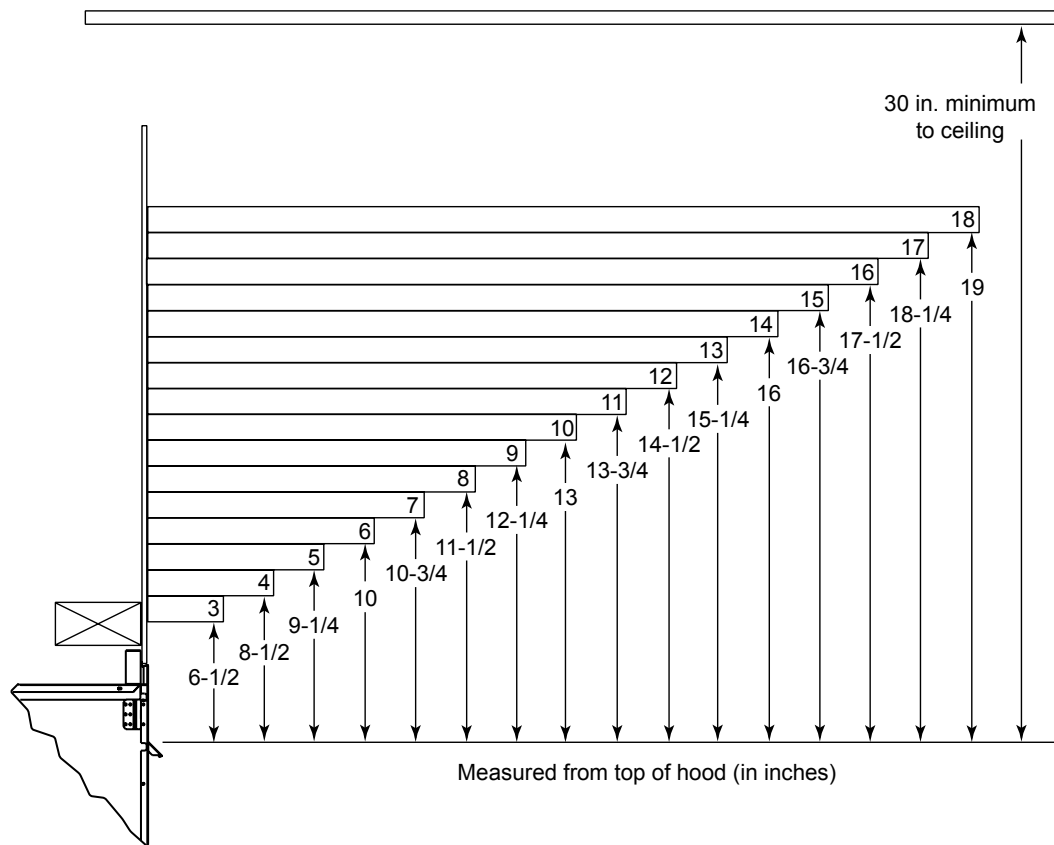
- Install appliance on hard metal or wood surfaces extending full width and depth of appliance.
- Do NOT install appliance directly on carpeting, vinyl, tile or any combustible material other than wood.
- Do NOT place furniture or any other combustible household objects within 36 in. of the appliance front.



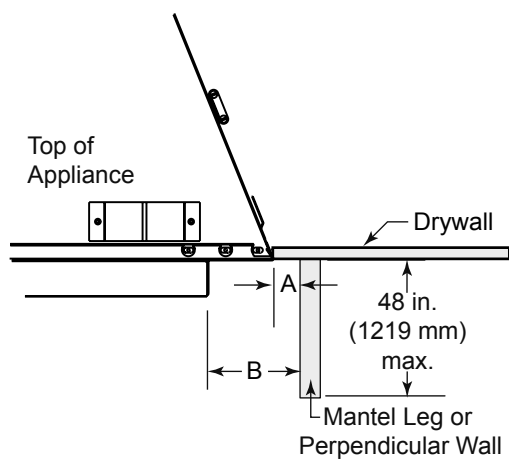
Model #		A Rough Opening (Width)	B Rough Opening (Height)	C Rough Opening (Depth)
RBV4236	in.	42	39-3/4	22
	mm	1067	1010	559
RBV4842	in.	48	39-3/4	22
	mm	1219	1010	559

Figure 3.2 Clearances to Combustibles

## D. Mantel Projections



**Figure 3.3** Clearances to Mantels or Other Combustibles Above Appliance



A	1 in. (25mm) min. to perpendicular wall
B	3-1/2 in. (89 mm) min. from fireplace opening to perpendicular wall

**Figure 3.4** Clearances to Combustible Mantel Legs or Wall Projections (acceptable on both sides of opening)

# 4 Termination Locations

## A. Vent Termination Minimum Clearances

Figure 4.1 specifies minimum vent heights for various pitched roofs.

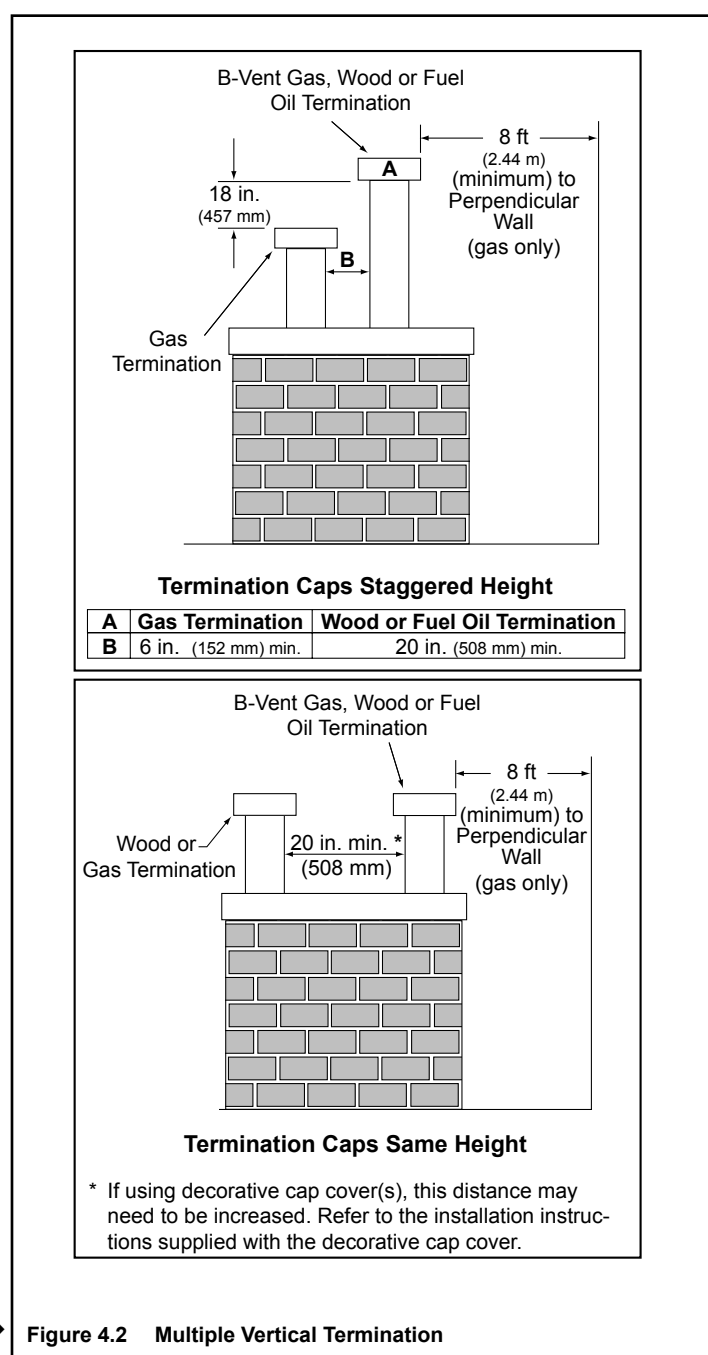
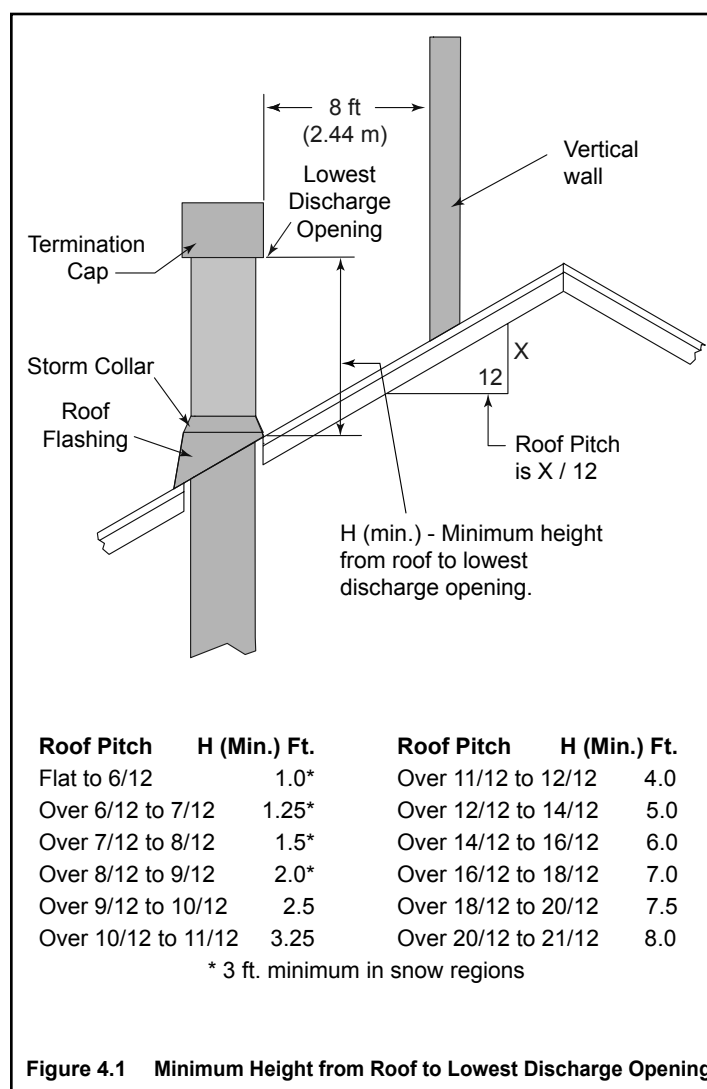
### ⚠ WARNING

**Fire Risk**  
**Explosion Risk**

Maintain vent clearance to combustibles as specified.

- Do not pack air space with insulation or other materials.

Failure to keep insulation or other materials away from vent pipe may cause fire.



# 5 Vent Information and Diagrams

## A. Vent Guidelines

**WARNING**

**Fire Risk**  
**Asphyxiation Risk**

This appliance requires the specified pipe for operation.

- Incorrect pipe may cause spillage, condensation and overheating.

These models require the following size B-Vent double wall vent pipe.

Model	Pipe Size	
RBV4236 Series	in.	6
	mm	152
RBV4842 Series	in.	6
	mm	152

- Follow pipe manufacturer's installation guidelines when installing the appliance.

**WARNING**

**Fire Risk**  
**Explosion Risk**  
**Asphyxiation Risk**

Do NOT connect this gas appliance to a chimney flue serving a separate solid-fuel or gas burning appliance.

- Vent this appliance directly outside.
- Use separate vent system for this appliance.

May impair safe operation of this appliance or other appliances connected to the flue.

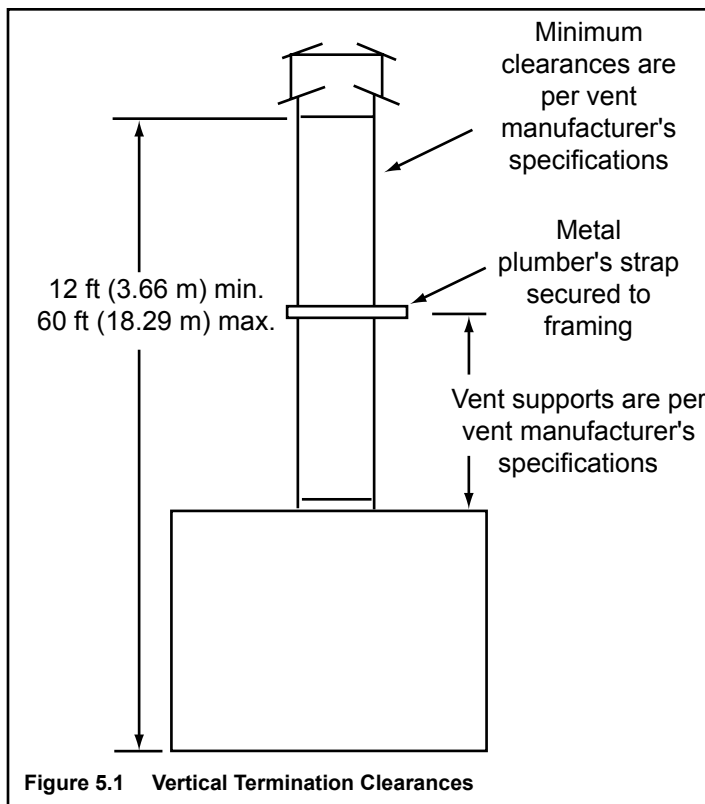
## CAUTION

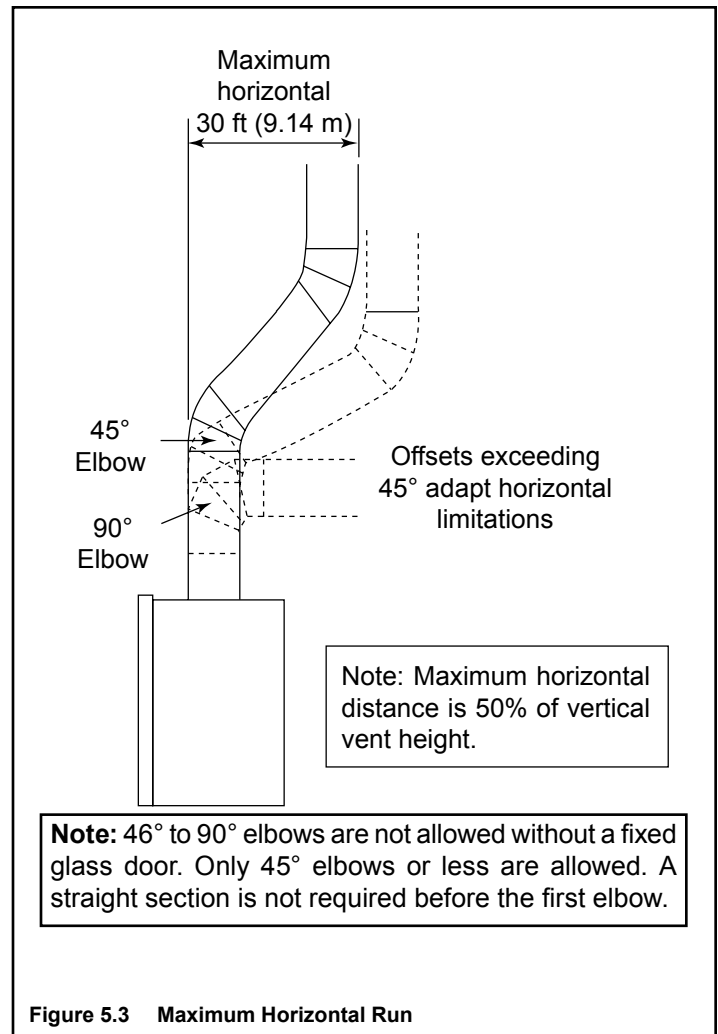
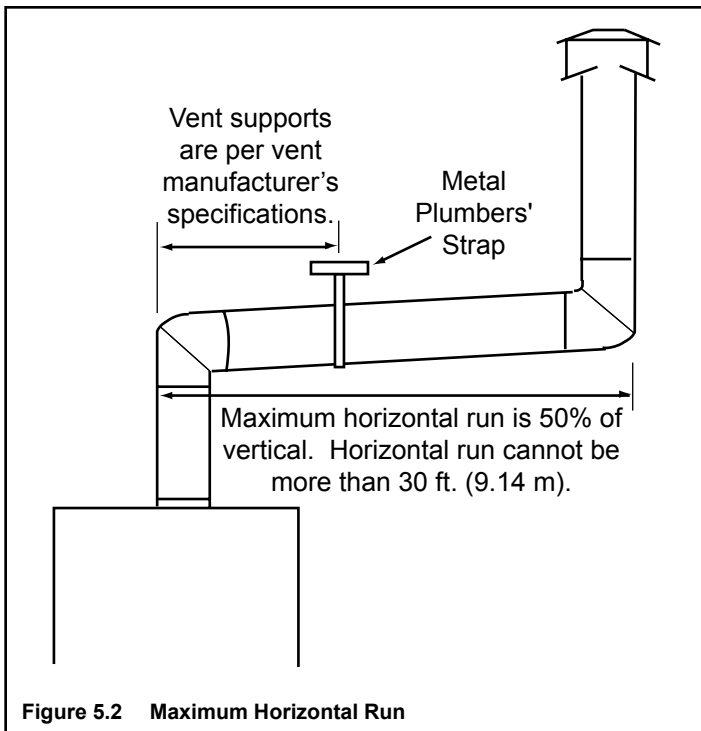
ALL vent configuration specifications MUST be followed.

- This product is tested and listed to appliance and vent manufacturer's specifications.
- Appliance performance will suffer if specifications are not followed.

## B. Vent System Configuration

- Rise to Run Ratio: 2:1
- Maximum Total Horizontal Run: 30 ft (9.14 m)
- Minimum Total Vertical Rise: 12 ft (3.66 m)
- Maximum Total Vertical Rise: 60 ft (18.29 m)
- Maximum Number of Elbows: Four 45°
- Maximum Number of 90° Elbows: Four**  
A maximum of four 90-degree elbows may be used on this appliance when used in conjunction with the fixed glass doors listed below:
  - DF361B
  - DF421B







	<p><b>WARNING</b></p>
	<p><b>Fire Risk</b> <b>Explosion Risk</b></p> <p>Insulation and other combustibles must not infringe on clearances.</p> <ul style="list-style-type: none"> <li>• ALWAYS maintain specified clearances around venting and firestop systems.</li> <li>• Install firestops as specified.</li> </ul> <p>Failure to keep insulation or other material away from vent pipe may cause fire.</p>

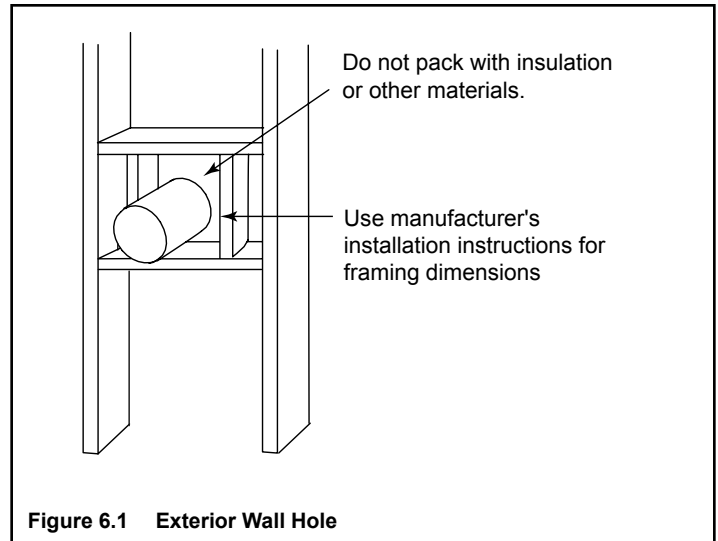
# 6 Vent Clearances and Framing

## A. Pipe Clearances to Combustibles

	<b>⚠ WARNING</b>
	<b>Fire Risk</b> <b>Explosion Risk</b> Maintain vent clearance to combustibles as specified. <ul style="list-style-type: none"><li>• Do not pack air space with insulation or other materials.</li><li>• National building codes recommend using attic shield to keep loose materials/insulation from contacting vent.</li></ul> Failure to keep insulation or other materials away from vent pipe may cause fire.

Follow vent pipe manufacturer's instructions for all clearances around pipe.

## B. Wall Penetration Framing





For a wall penetration consult B-vent pipe manufacturer's instructions. Use same dimensional framing materials as those used in the wall construction.

**Note:** This appliance **MUST** terminate vertically.

## C. Vertical Penetration Framing

Use B-vent manufacturer's firestops to provide adequate clearances.

	<b>⚠ WARNING</b>
	<b>Fire Risk</b> Keep loose materials or blown insulation from touching the vent pipe. <ul style="list-style-type: none"><li>• National building codes recommend using attic shield to keep loose materials/insulation from contacting vent.</li><li>• Hearth &amp; Home Technologies requires the use of an attic shield.</li></ul>

# 7 Appliance Preparation

## CAUTION



Sharp Edges

- Wear protective gloves and safety glasses during installation.



## A. Installing Outside Air Kit

## WARNING



**Fire Risk**

**Asphyxiation Risk**

Maintain vent clearance to combustibles as specified.

- Do not pack air space with insulation or other materials.
- National building codes recommend using attic shield to keep loose materials/insulation from contacting vent.

Failure to keep insulation or other materials away from vent pipe may cause fire.



This appliance will operate correctly only if adequate ventilation is provided to allow proper draft to the system.

An outside air kit is available as an optional feature with this appliance. An outside air kit helps to decrease the amount of room air taken by utilizing outside air for combustion. We strongly recommend that it be installed.

**Note:** The outside air kit inlet thimble should be positioned in a manner that will not allow snow, leaves, etc. to block the inlet. A 3 ft. (.91 m) minimum height difference must be maintained from the top of the uppermost chimney section to the outside combustion air inlet. Reference Section 2.

## WARNING



**Fire Risk**

**Asphyxiation Risk**

Do not draw outside combustion air from:

- Wall, floor or ceiling cavity.
- Enclosed space such as an attic or garage.
- Close proximity to exhaust vents or chimneys.

Fumes or odor may result.



- The outside air kit can only be installed on the left side of the appliance.
- Refer to Figures 7.1 and 7.2 for proper placement of outside air.

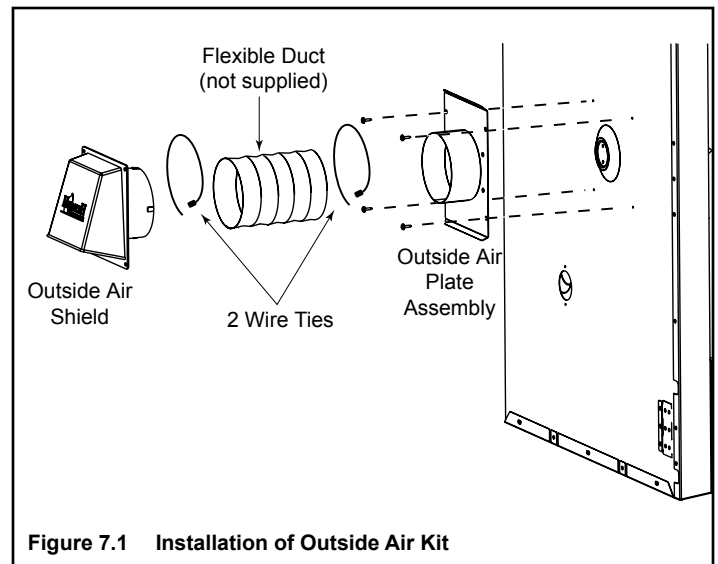


Figure 7.1 Installation of Outside Air Kit

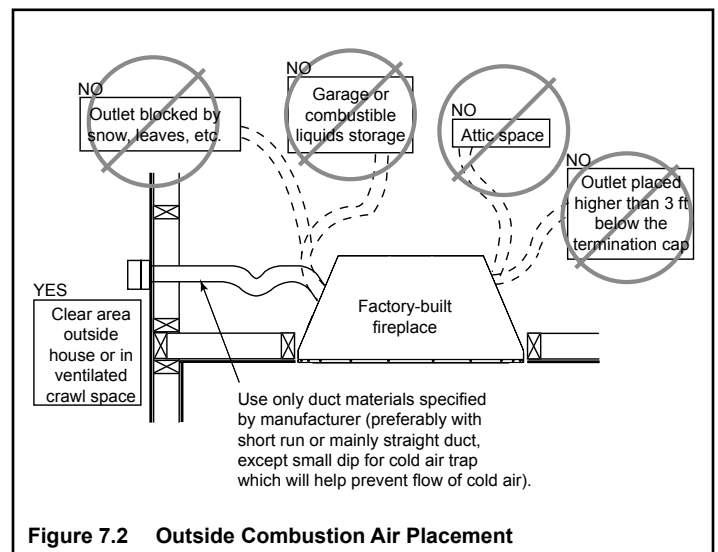


Figure 7.2 Outside Combustion Air Placement



## CAUTION

### Risk of Smoke Spillage

Outside air inlet must be located to prevent blockage from:

- Leaves
- Snow/ice
- Other debris

Blockage may cause combustion air starvation.



Figure 7.3 Outside Air Kit Handle Location

- Push handle down to open the outside air door (see Figure 7.3).
- When through burning appliance, push handle up to close the outside air door.

## B. Gas and Electrical Connections

Ensure that gas and electrical connections are installed at this time. Refer to Sections 9 and 10.

## C. Securing and Leveling Appliance



### WARNING

#### Fire Risk!

- Prevent contact with sagging, loose insulation.
- Do NOT install against combustible materials such as exposed insulation, plastic and insulation backer.

The diagram shows how to properly position, level, and secure the appliance (see Figure 7.4). Nailing tabs are provided to secure the appliance to the framing members.

- Place the appliance into position.
- Level the appliance from side to side and front to back.
- Shim the appliance as necessary. It is acceptable to use wood shims.
- Bend out nailing tabs on each side.
- Keep nailing tabs flush with the framing.
- Secure the appliance to the framing by using nails or screws through the nailing tabs.

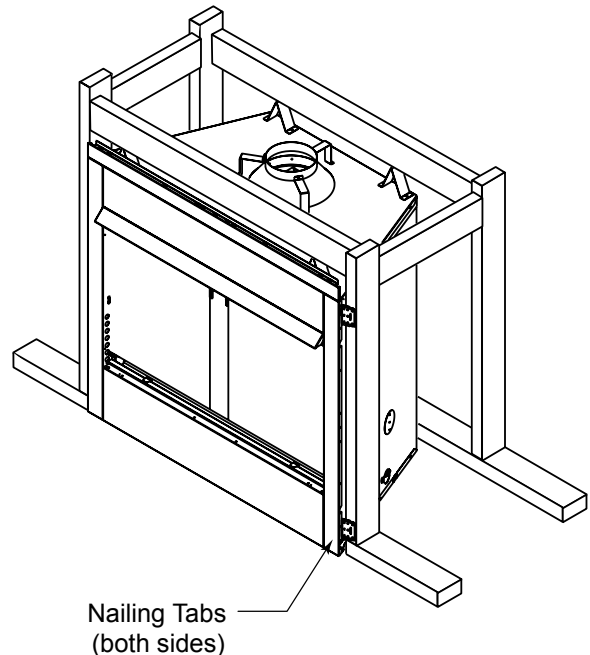


Figure 7.4 Proper Positioning, Leveling and Securing of an Appliance



## CAUTION

Do NOT notch into the framing around the appliance spacers.

## 8 Installing Vent Pipe




### A. Assemble Vent Sections

This B-Vent appliance requires 6 in. B-vent double-wall pipe. Follow the pipe manufacturer's installation guidelines when installing the appliance. This will ensure proper operation and prevent safety hazards.

 	<b>⚠ WARNING</b> <b>Fire Risk</b> <b>Exhaust Fumes Risk</b> <b>Impaired Performance of Appliance.</b> <ul style="list-style-type: none"><li>• Assemble pipe sections per B-Vent manufacturer's instructions.</li><li>• Use support tabs for screws.</li><li>• Pipe may separate if not properly joined.</li></ul>
---	--

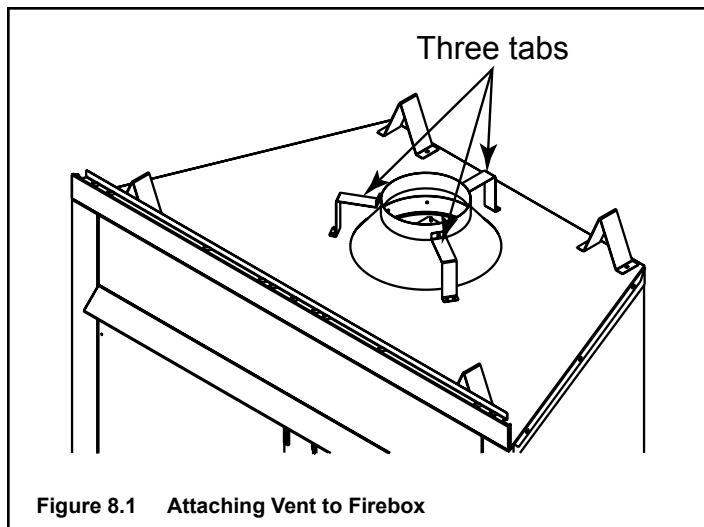
### C. Securing Vent Sections

Secure vent sections with vent supports following B-vent manufacturer's instructions.

  	<b>⚠ WARNING</b> <b>Fire Risk</b> <b>Explosion Risk</b> <b>Asphyxiation Risk</b> <p>Use vent run supports per vent manufacturer's installation instructions. Connect vent sections per vent manufacturer's installation instructions.</p> <ul style="list-style-type: none"><li>• Maintain all clearances to combustibles.</li><li>• Maintain specified slope (if required).</li></ul> <p>Improper support may allow vent to sag or separate.</p>
---	--

### B. Attach Vent to Firebox Assembly

Three tabs extend from appliance collar shield. Attach tabs to first section of B-vent pipe using self-tapping 1/4 in. screws supplied with appliance. See Figure 8.1.



# 9 Gas Information

## A. Fuel Conversion

Before making gas connections ensure appliance being installed is compatible with the available gas type.

Any natural or propane gas conversions necessary to meet the appliance and locality needs must be made by a qualified technician using Hearth & Home Technologies specified and approved parts.

## B. Gas Pressure

Proper input pressures are required for optimum appliance performance. Gas line sizing requirements need to be made following **NFPA51**.

### WARNING

**Fire Risk**

**Explosion Risk**

High pressure will damage valve.

- Disconnect gas supply piping **BEFORE** pressure testing gas line at test pressures above 1/2 psig.
- Close the manual shutoff valve **BEFORE** pressure testing gas line at test pressures equal to or less than 1/2 psig.

### WARNING

**Fire Risk**

**Explosion Risk**

Verify inlet pressures.

- High pressure may cause overfire condition.
- Low pressure may cause explosion.
- Verify minimum pressures when other household gas appliances are operating.

Install regulator upstream of valve if line pressure is greater than 1/2 psig.

Pressure requirements for appliance are shown in table below. Minimum pressures must be met when other household gas appliances are operating.

Pressure	Natural Gas	Propane
Minimum Inlet Pressure	5.0 in. w.c.	11.0 in. w.c.
Maximum Inlet Pressure	7.0 in. w.c.	14.0 in. w.c.
Manifold Pressure	3.5 in. w.c.	10.0 in. w.c.

## C. Gas Connection

**Note:** Have the gas supply line installed in accordance with local building codes, if any. If not, follow **ANSI 223.1**. Installation should be done by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.)

**Note:** A listed (and Commonwealth of Massachusetts approved) 1/2 in. (13 mm) T-handle manual shut-off valve and flexible gas connector are connected to the 1/2 in. (13 mm) control valve inlet.

- **If substituting for these components, please consult local codes for compliance.**

Refer to Reference Section 16 for location of gas line access in appliance.

**Note:** Gas line may be run from either side of appliance using one of the knockouts provided. Hole in outer shell NOT to exceed 2-1/2 in. and should never penetrate the firebox.

### WARNING

**Gas Leak Risk**

- Support control when attaching pipe to prevent bending gas line.

**Note:** The gap between supply piping and gas access hole may be caulked with high temperature caulk or stuffed with non-combustible, unfaced insulation to prevent cold air infiltration.

- Ensure that gas line does not come in contact with outer wrap of appliance. Follow local codes.
- Incoming gas line should be piped into the valve compartment and connected to the 1/2 in. connection on the manual shut-off valve.




- A small amount of air will be in the gas supply lines. When first lighting appliance it will take a short time for air to purge from lines. When purging is complete the appliance will light and operate normally.





## D. High Altitude Installations




U.L. listed gas appliances are tested and approved without requiring changes for elevations from 0 to 2000 ft in the USA and Canada.

When installing this appliance at an elevation above 2000 ft, it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Input rate should be reduced by 4% for each 1000 ft above a 2000 ft elevation in the U.S.A., or 10% for elevations between 2000 and 4500 ft in Canada. If the heating value of the gas has been reduced, these rules do not apply. To identify the proper orifice size, check with the local gas utility.

If installing this appliance at an elevation above 4500 ft (in Canada), check with local authorities.

 <b>WARNING</b>	
	<b>Fire Risk</b>
	<b>Explosion Risk</b>
	<ul style="list-style-type: none"> <li>• Gas build-up during line purge may ignite.</li> <li>• Purge should be performed by qualified technician.</li> <li>• Ensure adequate ventilation.</li> <li>• Ensure there are no ignition sources such as sparks or open flames.</li> </ul>

 <b>WARNING</b>	
	<b>CHECK FOR GAS LEAKS</b>
	<b>Fire Risk</b>
	<b>Explosion Risk</b>
	<b>Asphyxiation Risk</b>
	<ul style="list-style-type: none"> <li>• Check all fittings and connections.</li> <li>• Do not use open flame.</li> <li>• After the gas line installation is complete, all connections must be tightened and checked for leaks with a commercially available, non-corrosive leak check solution. Be sure to rinse off all leak check solution following testing.</li> </ul>
	Fittings and connections may have loosened during shipping and handling.

 <b>WARNING</b>	
	<b>Fire Risk</b>
	<b>Explosion Risk</b>
	Do NOT change the valve settings.
	<ul style="list-style-type: none"> <li>• This valve has been preset at the factory.</li> <li>• Changing valve settings may result in fire hazard or bodily injury.</li> </ul>

# 10 Electrical Information

## A. Recommendation for Wire

This appliance requires 110-120 VAC to be wired to the junction box for use of optional accessories and for proper operation of the appliance.

## B. Connecting to the Appliance

- This appliance may be used with a wall switch, wall mounted thermostat and/or a remote control.
- Follow parameters for locating thermostat (see individual thermostat instructions) to ensure proper operation of appliance.
- Use low resistance thermostat wire for wiring from ignition system to the wall switch and thermostat.
- Keep wire lengths short as possible by removing any excess wire length.
- Low voltage and 110 VAC voltage cannot be shared within the same wall box.



### WARNING

#### Shock Risk

#### Explosion Risk

Do NOT wire 110V to valve.

Do NOT wire 110V to wall switch

- Incorrect wiring will damage millivolt values.
- Incorrect wiring will override IPI safety lockout and may cause explosion.



**Note:** This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with National Electric Code **ANSI/NFPA 70**-latest edition or the Canadian Electric Code, **CSA C221.1**.

## C. Intellifire Ignition System Wiring

This appliance requires a 110 VAC supply to the appliance junction box for operation. A wiring diagram is shown in Figure 10.2.

This appliance is equipped with an Intellifire control valve which operates on a 3 volt system.

This appliance is supplied with a battery pack and a 3 volt AC transformer, which requires the installation of the supplied junction box. It is highly recommended that the junction box be installed at this time to avoid reconstruction.

The battery pack requires two D cell batteries (not included). Batteries cannot be placed in the battery pack while using the 3 volt AC transformer. Conversely, the transformer must be unplugged if the battery pack is used.

### CAUTION

**Battery** polarity must be correct or module damage will occur.

## Optional Accessories Requirements

Wiring for optional accessories should be done now to avoid reconstruction.

### CAUTION

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.



### ⚠ CAUTION

#### Shock Risk

- Replace damaged wire with type 105° C rated wire.
- Wire must have high temperature insulation.

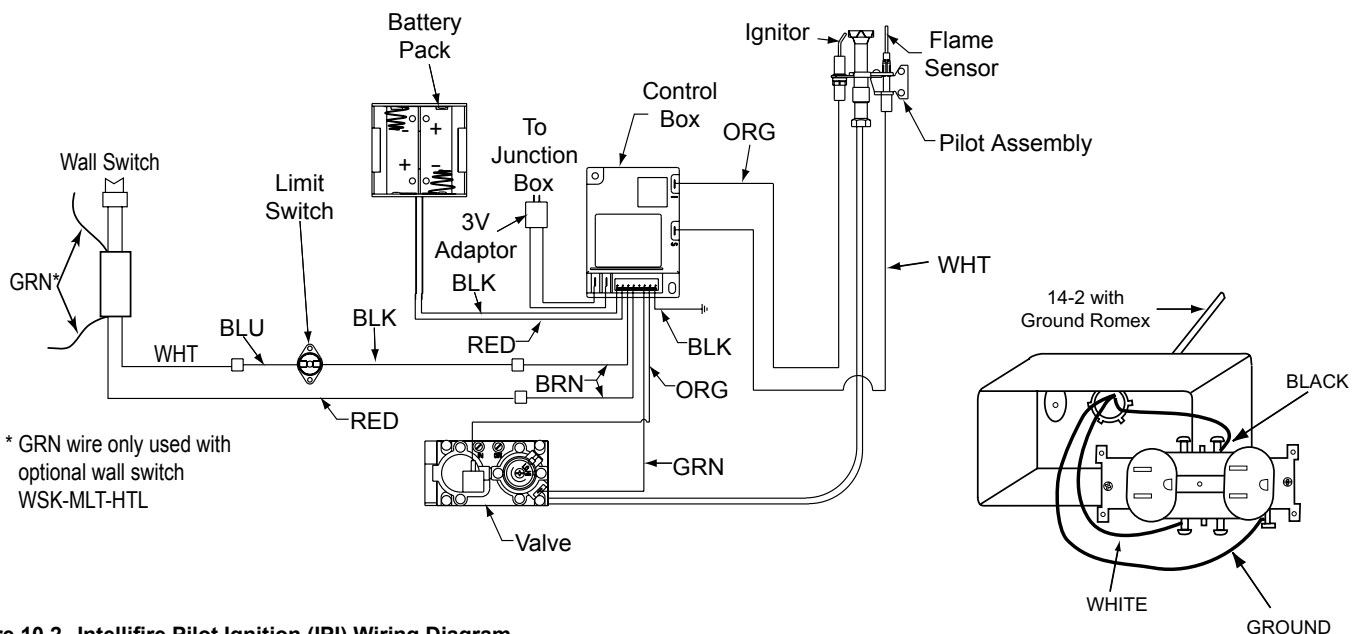





Figure 10.2 Intellifire Pilot Ignition (IPI) Wiring Diagram

## D. Junction Box Installation

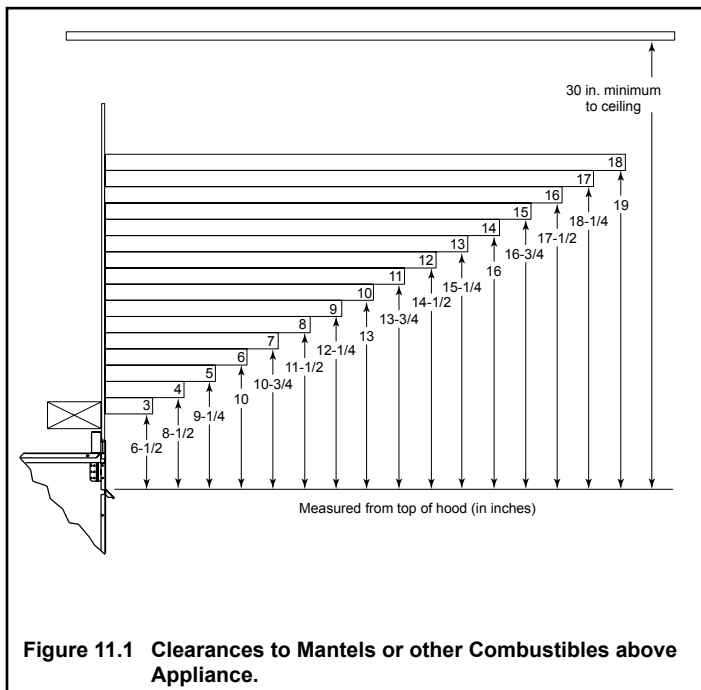
- Remove the junction box assembly from the valve compartment.
- If the box is being wired from the OUTSIDE of the appliance;
  - Loosen two screws on the Romex connector, feed the necessary length of wire through the connector and tighten the screws.
  - Make all necessary wire connections to the receptacle and assemble the receptacle and cover to the junction box.
  - Attach the junction box assembly to the outside of the appliance with the two screws provided.
- If the box is being wired from the INSIDE of the appliance;
  - Pull the electrical wires from outside the appliance through this opening into the valve compartment.
  - Loosen the two screws on the Romex connector, feed the necessary length of wire through the connector and tighten the screws.
  - Make all necessary wire connections to the receptacle and assemble the receptacle and cover to the junction box.
  - Attach the junction box assembly to the inside of the appliance with the two screws provided.
- If the box is not to be wired at the time of appliance installation, assemble the receptacle and cover to the box and install on the inside of the appliance.

	 <b>WARNING</b>
	<b>Shock Risk</b> <b>Explosion Risk</b> Do NOT wire 110V to valve. Do NOT wire 110V to wall switch <ul style="list-style-type: none"><li>• Incorrect wiring will damage millivolt values.</li><li>• Incorrect wiring will override IPI safety lockout and may cause explosion.</li></ul>

# 11 Finishing

## A. Mantel Projections

Figure 11.1 shows the minimum vertical and corresponding maximum horizontal dimensions of appliance mantels or other combustible projections above the top front edge of the appliance.



## B. Facing Material

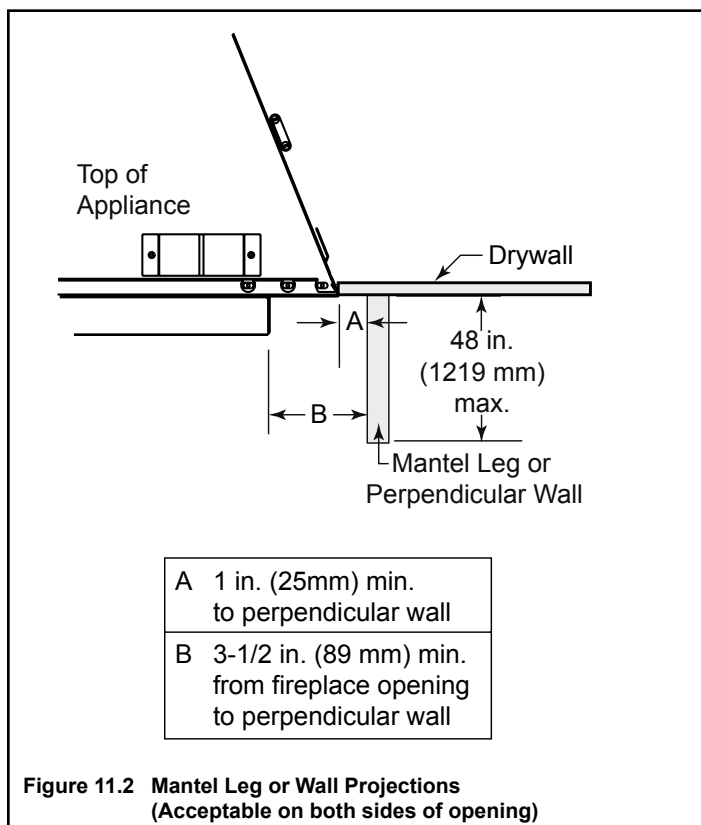
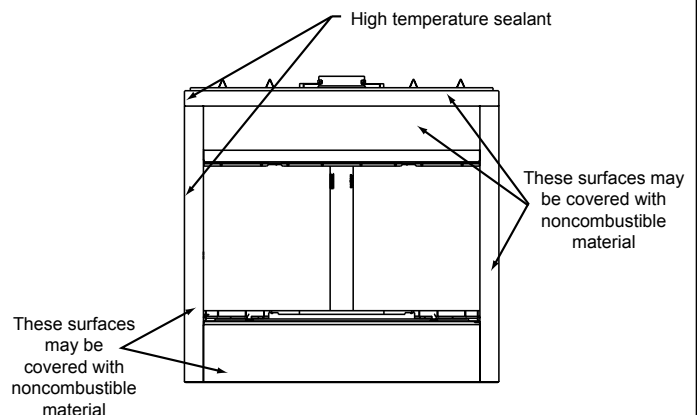


### WARNING

#### Fire Risk

Do NOT obstruct air inlets.  
Finishing materials must not interfere with:

- Air flow through inlets.
- Access for service.



### WARNING

#### Fire Risk

Finish all edges and fronts to clearances and specifications listed in manual.

- Black metal appliance front may be covered with non-combustible material only.
- Do NOT overlap combustible materials onto appliance front.
- Install combustible materials only up to specified clearances on top, front and sides.
- Seal joints between the finished wall and appliance top and sides using only a 300° F minimum sealant.



# 12 Appliance Setup

## A. Remove the Shipping Materials

Remove shipping materials from inside or underneath the firebox.

## B. Clean the Appliance

Clean/vacuum any sawdust that may have accumulated inside the firebox or underneath in the control cavity.

## C. Accessories

Install approved accessories (refer to Section 16) per instructions included with accessories.

### ⚠ WARNING



**Shock Risk**

**Fire Risk**

Use ONLY optional accessories approved for this appliance.



- Using non-listed accessories voids warranty.
- Using non-listed accessories may result in a safety hazard.
- Only Hearth & Home Technologies approved accessories may be used safely.

## D. Log Assembly

- Base logs have been permanently mounted on the grate assembly and should not be moved. See Figure 12.1.



Figure 12.1 Base Logs

- Install Y-shaped log on right side of grate using locating pins to position. See Figure 12.2.



Figure 12.2 Placing Right Top Log

- Install left top log as shown in Figure 12.3 using locating pins to position log properly.



Figure 12.3 Placing Left Top Log

## E. Lava Rock, Vermiculite, Rockwool Placement



### ⚠ WARNING

#### Explosion Risk

- Follow rockwool placement instructions in this manual.
- Do NOT place rockwool directly over burner ports.
- Replace rockwool material annually.

Improperly placed rockwool interferes with proper burner operation.

### Placing the Lava Rock and Vermiculite

- Place lava rock on top of the lava rock tray in front of and under the burner. See Figure 12.4.
- Sprinkle vermiculite evenly over area covered by lava rock. See Figure 12.5.
- It is not necessary to use entire bag of lava rock or vermiculite.



Figure 12.4 Placement of Lava Rock



Figure 12.5 Placement of Vermiculite

### Placing the Rockwool

- Place 1/2 in. pieces of rockwool on the burner pan so that rockwool touches but does not cover the holes in the burner pan. See Figure 12.6.
- Place rockwool under the front logs as shown in Figure 12.7.
- It is not necessary to use all the rockwool.



Figure 12.6 Placement of Rockwool



Figure 12.7 Placement of Rockwool Under Front Logs

## F. Log Removal/Replacement

The log set should look similar to that in Figure 12.8.



Figure 12.8 Reveal Log Set



Figure 12.11 Remove Hearth Refractory - Step 2

- Brush the lava rock away from the hearth refractory as shown in Figure 12.9.
- Remove log/grate assembly from the hearth pan by removing two screws (one per side). See Figure 12.12.



Figure 12.9 Clear Lava Rock



Figure 12.12 Remove Screws From Sides

- Remove/open the hearth refractory as shown in Figures 12.10 and 12.11.
- Lift up on log/grate assembly to remove it from appliance and set aside.
- Reverse the order to reinstall the log/grate assembly.



Figure 12.10 Remove Hearth Refractory - Step 1

## G. Glass Doors



### ⚠ WARNING

Handle glass with care.

- Inspect the gasket to ensure it is undamaged.
- Inspect the glass for cracks, chips or scratches.
- Do NOT strike, slam or scratch glass.
- Do NOT operate appliance with glass assembly removed, cracked, broken or scratched.
- Replace glass assembly as a complete assembly.

If you have decided to install optional doors on your appliance, please use them correctly. While operating your appliance, you should either have the doors completely open or completely closed, but never partially open.

**Note:** Glass doors are not optional in the Commonwealth of Massachusetts. They are required.

- DM1036 or DM1042 door installation on the RBV4236 or RBV4842 requires longer pins. The longer pins and screws to attach them are located on the valve bracket of the appliance. See Figure 12.14.

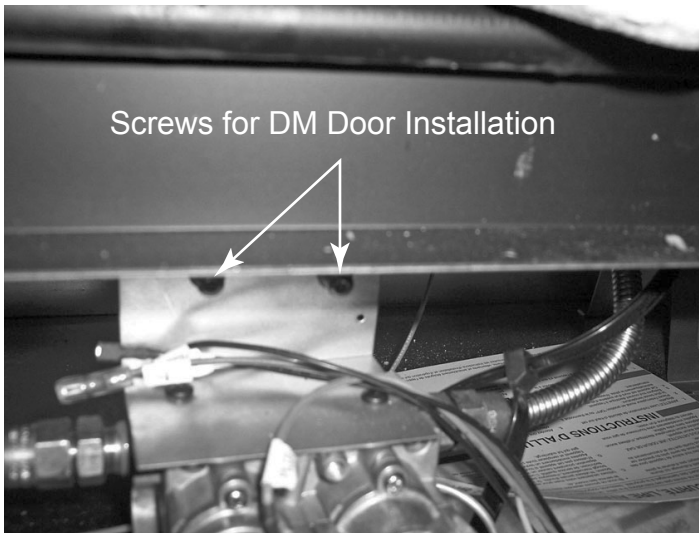


Figure 12.14 Pins & Screws for DM Door Installation - Reveal



### ⚠ WARNING

#### Fire Risk

#### Combustion Fumes Risk

- Appliances equipped with optional glass doors **must** be operated with doors fully open or fully closed.
- Only use glass doors certified for use with this appliance.

If doors are left partially open, gas and flames may be drawn out of the appliance opening.



- Remove the shorter door pins using a phillips screwdriver and replace them with the longer pins. See Figure



Figure 12.15 Install Pins

## H. Hood

The hood is shipped on top of the outer shell of the appliance. Remove the hood from its shipping location. Locate the four hood retaining clips and slide the hood into them. The hood must be attached or a fire hazard may result. See Figure 12.13.



Figure 12.13 Installing the Hood



## I. Air Shutter Setting

- The logs and burner must be removed to access the air shutter. Refer to Section 12.F.
- Remove the two screws attaching the front burner support to the firebox bottom. See Figure 12.16.



Figure 12.16 Remove Screws Attaching Front Burner Support

- Remove the two screws attaching the back burner support to the burner pan. See Figure 12.17.

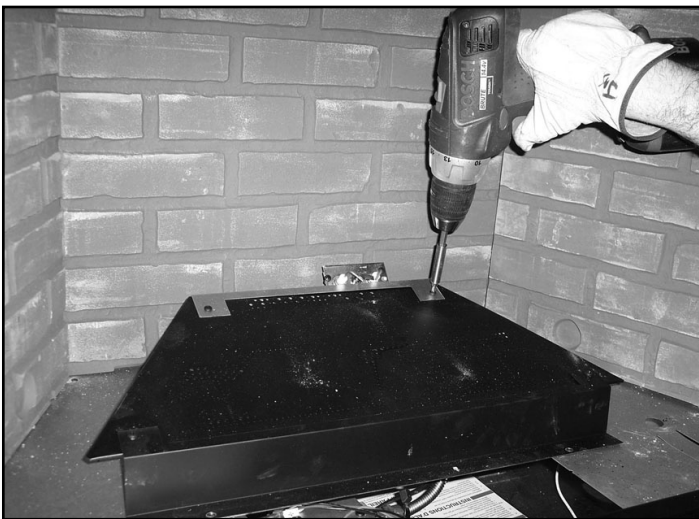


Figure 12.17 Remove Screws Attaching Back Burner Support

- Slide the burner assembly to the left and remove from the appliance. See Figure 12.18.



Figure 12.18 Side Burner Assembly to Left

- The shutter can be adjusted as shown in Figure 12.19
- Closed position - natural gas
- Open position - propane



Figure 12.19 Adjust Air Shutter

# 13 Operating Instructions

## A. Before Operating This Appliance

Have a qualified technician:

- Remove all shipping materials from inside and/or underneath the firebox.
- Review proper placement of logs, rockwool, lava rock and vermiculite.
- Check the wiring.
- Check the air shutter adjustment.
- Ensure that there are no gas leaks.
- Ensure that the glass doors are in the proper position.
- Ensure that the flow of combustion and ventilation air is not obstructed (front grilles and vent caps).

### CAUTION

If installing Intellifire Ignition battery backup:

- Do not install batteries if the backup mode may not be used for extended time.
- Batteries may leak.
- Install batteries only when needed for power outage.

### WARNING

Do NOT use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

### WARNING



**Fire Risk**

**Burn Risk**

**HOT! DO NOT TOUCH.**

**SEVERE BURNS MAY RESULT.**

**CLOTHING IGNITION MAY RESULT**



Glass and other surfaces are hot during operation and cool down.

- Keep children away.
- CAREFULLY SUPERVISE children in same room as appliance.
- Alert children and adults to hazards of high temperatures.
- Do NOT operate with protective barriers open or removed.
- Keep clothing, furniture, draperies and other combustibles away.

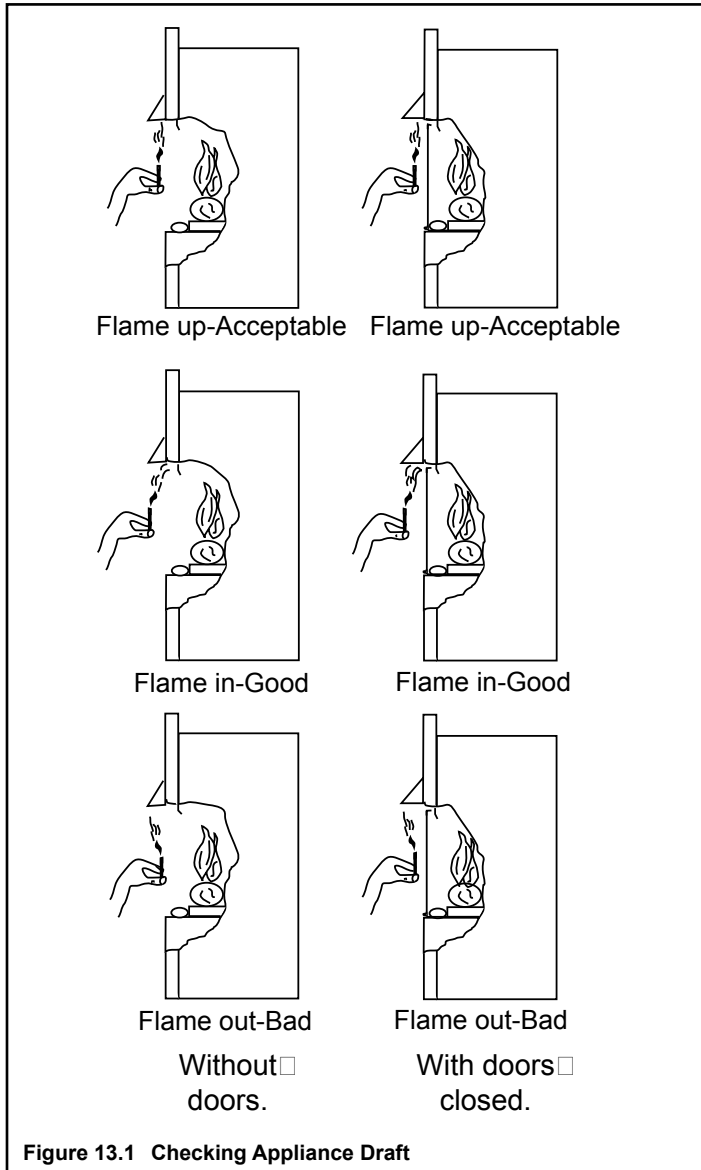
### WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

## B. Check Appliance Draft

Check draft of appliance to verify proper venting conditions.

- Close all windows and doors, turn on all exhaust fans in home.
- Appliance is to be completely assembled to normal operating condition.
- Turn on appliance and allow to operate for at least 10 minutes.
- Check draft as shown in Figure 13.1. This can be done using a smoke or flame producing match.
- Hold lit match at bottom edge of draft hood opening and observe flame/smoke per the figure.

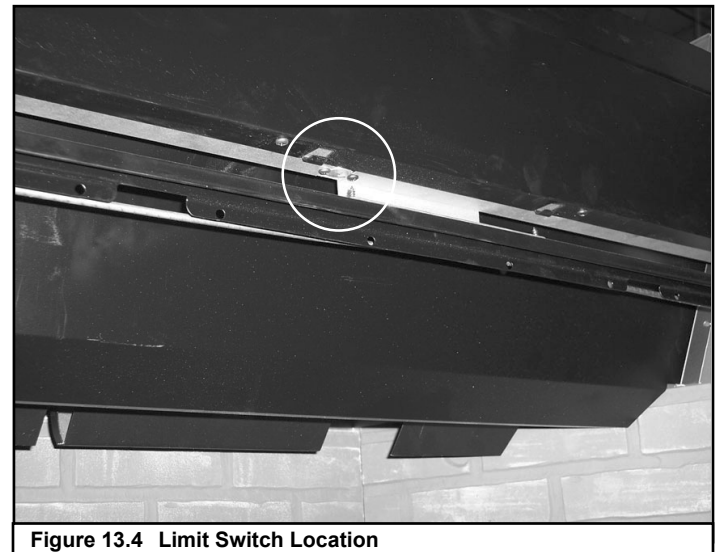


## C. High Limit Safety Switch

A high limit switch has been installed on this appliance. This switch automatically turns off the appliance if it becomes too hot. If this happens, do not attempt to operate the appliance until it has been examined by a qualified service technician. For the high limit switch location, see Figures 13.2-13.3.



**Figure 13.2 Remove the Hood**



**Figure 13.4 Limit Switch Location**

## Intellifire Ignition

**WARNING:** If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- ## WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.

1. STOP! Read the safety information above on this label.
2. Turn wall switch to the "OFF" position or thermostat to the lowest setting.
3. Turn off all electric power to the appliance.
4. This appliance is equipped with an ignition device which automatically lights the pilot. Do NOT try to light the pilot by hand.
5. Wait five minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
6. To turn on the burner, turn on all electric power to this appliance and turn on the wall switch or set the thermostat to the desired setting.
7. If the appliance will not operate, follow the instructions "TO TURN OFF GAS TO APPLIANCE" and call your service technician or gas supplier.

1. Turn off wall switch or set thermostat to lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Push the gas control lever in and move to the "OFF" position or push the gas control lever to the "OFF" position. Do not force.
4. Replace the control access panel.

33631D

\* Also certified for installation in a bedroom or a bed-sitting room.  
\* For U.S. only!

# NATURAL GAS



## E. After the Appliance is Lit

### Initial Break-in Procedure

When you light the appliance, you may notice that it produces heat which does have an associated odor or smell. If you feel this odor is excessive it may require the initial three to four hour continuous burn on high followed by a second burn up to 12 hours to fully drive off any odor from paint and lubricants used in the manufacturing process. Condensation of the glass is normal.

**Note:** This appliance should be run three to four hours on the initial start-up. Turn it off and let it cool completely. Clean glass doors (if installed). Close the doors (if installed) and run the appliance for an additional 12 hours. This will help cure the products used in the paint and logs.

During this break-in period it is recommended that some windows in the house be opened for air circulation. This will help avoid setting off smoke detectors, and help eliminate any odors associated with the appliance's initial burning.

### CAUTION

- Prevent accidental appliance operation when not attended.
- Unplug or remove batteries from remote control in your absence or if appliance will not be used for an extended period of time.
- Property damage possible from elevated temperatures.

### CAUTION

Smoke and odors are released during initial operation.

- Open windows for air circulation.
- Leave room during initial operation.
- Smoke may set off smoke detectors.

Smoke and odors may be irritating to sensitive individuals.



### ⚠ WARNING

#### Fire Risk High Temperatures

Keep combustible household items away from appliance.

Do NOT obstruct combustion and ventilation air.

- Do NOT place combustible items on top of or in front of appliance.
- Keep furniture, draperies away from appliance.



### ⚠ WARNING

#### Fire Risk

Keep combustible materials, gasoline and other flammable vapors and liquids clear of appliance.

- Do NOT store flammable materials in the vicinity of the appliance.
- Do NOT use gasoline, lantern fuel, kerosene, charcoal lighter fluid or similar liquids in this appliance.

Combustible materials may ignite.

## F. Frequently Asked Questions

Issue	Solutions
Condensation on the glass	This is a result of gas combustion and temperature variations. As the appliance warms, this condensation will disappear.
Blue flames	This is a result of normal operation and the flames will begin to yellow as the appliance is allowed to burn for 20 to 40 minutes.
Odor from appliance	When first operated, this appliance may release an odor for the first several hours. This is caused by the curing of the paint and the burning off of any oils remaining from manufacturing.
Film on the glass	This is a normal result of the curing process of the paint and logs. Glass should be cleaned within 3 to 4 hours of initial burning to remove deposits left by oils from the manufacturing process. A non-abrasive cleaner such as gas fireplace glass cleaner may be necessary. See your dealer.
Metallic noise	Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of the fireplace.
Is it normal to see the pilot flame burn continually?	In an Intellifire ignition system it is normal to see the pilot flame, but it should turn off when ON/OFF is turned off. In a standing pilot system the pilot will always stay on.

# 14 Troubleshooting

With proper installation, operation and maintenance your gas appliance will provide years of trouble-free service. If you do experience a problem, this troubleshooting guide will assist a qualified service person in the diagnosis of a problem and the corrective action to be taken. This troubleshooting guide can only be used by a qualified service technician.

## Intellifire Ignition System

Symptom		Possible Causes	Corrective Actions
1.	The ignitor/module makes noise, but no spark.	A. Incorrect wiring.	Verify "S" wire (white) for sensor and "I" wire (orange) for ignitor are connected to the correct terminals on the module and the pilot assembly. Reversed wires at the module may cause the system to make a sparking noise, but the spark may not be present at pilot hood.
		B. Loose connections or electrical shorts in the wiring.	Verify there are no loose connections or electrical shorts in wiring from module to pilot assembly. The rod closest to the pilot hood should be ignitor. Verify connections underneath pilot assembly are tight; also verify the connections are not grounding out to the metal chassis, pilot burner, pilot enclosure, mesh screen if present, or any other metal object.
		C. Ignitor gap is too large.	Verify gap of ignitor to pilot hood. The gap should be approximately .17 in. or 1/8 in.
		D. Faulty module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF rocker switch or wall switch in ON position. Hold ground wire about 3/16 in. away from "I" terminal on module. If there is no spark at "I" terminal, module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode.
2.	Pilots won't light, there is no noise or spark.	A. Transformer installed incorrectly.	Verify that transformer is installed and plugged into module. Check voltage of transformer under load at space connection on module with ON/OFF switch in ON position. Acceptable readings of a good transformer are between 3.2 and 2.8 volts AC.
		B. A shorted or loose connection in wiring configuration or wiring harness.	Remove and reinstall the wiring harness that plugs into module. Verify there is a tight fit. Verify pilot assembly wiring to module. Remove and verify continuity of each wire in wiring harness.
		C. Improper wall switch wiring.	Verify wall switch is wired correctly.
		D. Module not grounded.	Verify black ground wire from module wire harness is grounded to metal chassis of appliance.
		E. Faulty module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF rocker switch or wall switch in ON position. Hold ground wire about 3/16 in. away from "I" terminal on module. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode.
3.	Pilot lights but continues to spark, and main burner will not ignite. (If the pilot continues to spark after the pilot flame has been lit, flame rectification has not occurred.)	A. A shorted or loose connection in sensor rod.	Verify all connections to wiring diagram in manual. Verify connections underneath pilot assembly are tight. Verify connections are not grounding out to metal chassis, pilot burner, pilot enclosure or screen if present, or any other metal object.
		B. Poor flame rectification or contaminated sensor rod.	Verify flame is engulfing sensor rod. If the pilot assembly does not have a ground strap, consider installing one to increase flame rectification. Verify correct pilot orifice is installed and inlet gas specifications are met. Flame carries rectification current, not the gas. If flame lifts from pilot hood, the circuit is broken. A wrong orifice or too high an inlet pressure can cause pilot flame to lift. The sensor rod may be contaminated. Clean sensor rod with emery cloth.
		C. Module is not grounded.	Verify that module is securely grounded to metal chassis of appliance. Verify that the wire harness is firmly connected to module.
		D. Damaged pilot assembly or dirty sensor rod.	Verify that ceramic insulator around the sensor rod is not cracked, damaged, or loose. Verify connection from sensor rod to white sensor wire. Clean sensor rod with emery cloth to remove any contaminants that may have accumulated on sensor rod. Verify continuity with a multimeter with ohms set at lowest range.
		E. Faulty module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF rocker switch or wall switch in ON position. Hold ground wire about 3/16 in. away from "I" terminal on module. If there is no spark at "I" terminal, module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode.

Symptom		Possible Causes		Corrective Actions
4.	Pilot sparks, but pilot will not light.	A.	Correct gas supply.	Verify that incoming gas line ball valve is "open". Verify that inlet pressure reading is within acceptable limits, inlet pressure must not exceed 14 in. w.c.
		B.	Ignitor gap is too large.	Verify that spark gap from ignitor to pilot hood is .17 in. or 1/8 in.
		C.	Module is not grounded.	Verify module is securely grounded to metal chassis of appliance.
		D.	Module voltage output/valve/pilot solenoid ohms readings.	Replace module.

# 15 Maintaining and Servicing the Appliance

Although the frequency of appliance servicing and maintenance will depend on use and the type of installation, a qualified service technician should perform an appliance check-up at the beginning of each heating season.

## WARNING

### Risk of injury or property damage

#### Before servicing:

- Turn off gas.
- Turn off electricity to appliance.
- Disable remote control, if one is present.
- Ensure appliance is completely cooled.

#### After Servicing:

- Replace any screen or barrier that was removed.
- Reseal and reinstall any venting removed for servicing.

## WARNING



Annual inspection by qualified technician recommended.

#### Check:

- Condition of doors, surrounds and fronts.
- Condition of glass, glass assembly and glass seal.
- Obstructions of combustion and ventilation air.
- Condition of logs.
- Condition of firebox.
- Burner ignition and operation.
- Burner air shutter adjustment.
- Gas connections and fittings.
- Obstructions of termination cap.

#### Clean:

- Glass.
- Air passageways, grilles, control compartment.
- Burner, burner ports.

#### Risk of:

- Fire
- Delayed ignition or explosion
- Exposure to combustion fumes
- Odors

## CAUTION



Handle glass assembly with care.

**Note:** Clean glass after initial 3-4 hours operation. **Longer operation without cleaning glass may cause a permanent white film on glass.**

#### When cleaning glass door:

- Avoid striking, scratching or slamming doors.
- Do NOT use abrasive cleaners.
- Use a hard water deposit glass cleaner on white film.
- Do NOT clean glass when it is hot.
- Turn off appliance after 3-4 hours of operation and ALLOW TO COOL.
- Remove and clean glass assembly.
- Replace glass assembly and operate appliance for an additional 12 hours.

Refer to maintenance instructions.

## WARNING



#### Fire Risk

#### Explosion Risk

Inspect external vent cap regularly.



- Ensure no debris blocks cap.
- Combustible materials blocking cap may ignite.
- Restricted air flow affects burner operation.

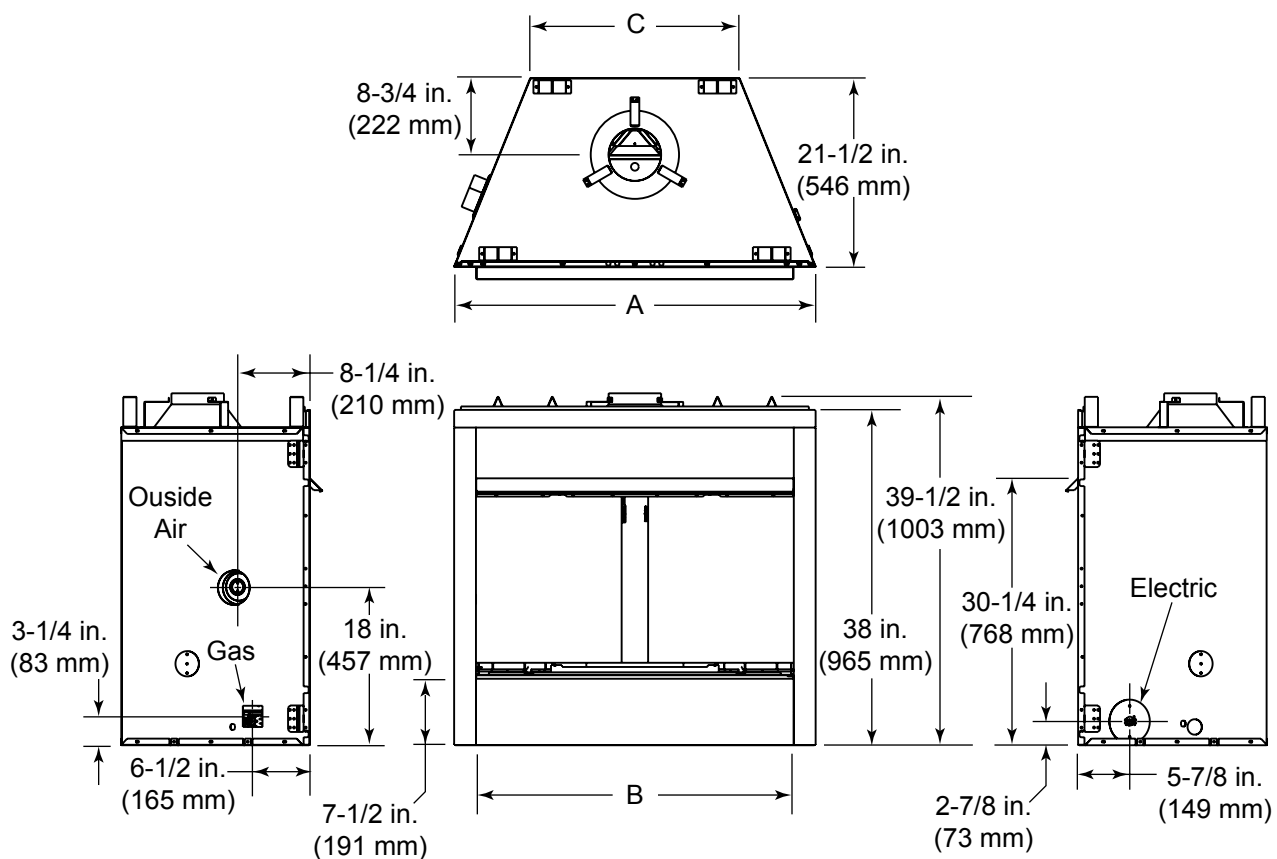
## Maintenance and Service Tasks:

Inspect	Maintenance Tasks
Doors, surrounds and fronts	<ol style="list-style-type: none"> <li>1. Assess condition of screen and replace as necessary. <b>Recommend addition of screen if one is not present.</b></li> <li>2. Inspect for scratches, dents or other damage and repair as necessary.</li> <li>3. Verify no obstructions to airflow through the louvers.</li> <li>4. Verify proper clearance to combustible household objects is maintained.</li> </ol>
Gasket seal, glass assembly and glass	<ol style="list-style-type: none"> <li>1. Inspect gasket seal and its condition.</li> <li>2. Inspect glass panels for scratches and nicks that can lead to breakage when exposed to heat.</li> <li>3. Confirm there is no damage to glass or glass frame. Replace as necessary.</li> <li>4. Verify that latches engage properly, clip studs are not stripped, and glass attachment components are intact and operating properly. Replace as necessary.</li> <li>5. Clean glass using a nonabrasive cleaner such as Brasso®. Replace glass assembly if severely coated with silicate deposits that cannot be removed.</li> </ol>
Valve compartment and firebox top	<ol style="list-style-type: none"> <li>1. Vacuum and wipe out dust, cobwebs, debris or pet hair. Use caution when cleaning these areas. Screw tips that have penetrated the sheet metal are sharp and should be avoided.</li> <li>2. Remove any foreign objects.</li> <li>3. Verify unobstructed air circulation.</li> </ol>
Logs	<ol style="list-style-type: none"> <li>1. Inspect for broken, damaged, or missing logs. Replace as necessary.</li> <li>2. Verify correct log placement and no flame impingement causing sooting. Correct as necessary.</li> </ol>
Firebox	<ol style="list-style-type: none"> <li>1. Inspect for paint condition, warpage, corrosion or perforation. Sand and repaint as necessary.</li> <li>2. Replace appliance if firebox has been perforated.</li> </ol>
Burner ignition and operation	<ol style="list-style-type: none"> <li>1. Verify burner is properly secured and aligned with pilot or ignitor.</li> <li>2. Clean off burner top, inspect for plugged ports, corrosion or deterioration. Replace burner if necessary.</li> <li>3. Replace rockwool with new dime-sized and shaped pieces. Do not block ports or obstruct lighting paths.</li> <li>4. Check for smooth lighting and ignition carryover to all ports. Verify there is no ignition delay.</li> <li>5. Inspect for lifting or other flame problems.</li> <li>6. Verify air shutter is clear of dust and debris.</li> <li>7. Inspect orifice for soot, dirt or corrosion.</li> <li>8. Verify manifold and inlet pressures. Adjust regulator as required.</li> <li>9. Inspect pilot flame strength. Clean or replace orifice as necessary.</li> <li>10. Inspect thermocouple/thermopile or IPI sensor rod for soot, corrosion and deterioration. Clean with emery cloth or replace as required.</li> <li>11. Verify millivolt output. Replace as necessary.</li> </ol>
Venting	<ol style="list-style-type: none"> <li>1. Inspect venting for blockage or obstruction such as birds' nests, leaves, etc.</li> <li>2. Confirm that termination cap remains clear and unobstructed by plants, etc.</li> <li>3. Verify that termination cap clearance to subsequent construction (building additions, decks, fences or sheds) has been maintained.</li> <li>4. Inspect for corrosion or separation.</li> <li>5. Verify weather stripping sealing and flashing remain intact.</li> <li>6. Inspect draft shield to verify it is not bent, damaged or missing.</li> </ol>
Remote controls	<ol style="list-style-type: none"> <li>1. Verify operation of remote.</li> <li>2. Replace batteries in remote transmitters and battery-powered receivers.</li> <li>3. Verify batteries have been removed from battery back-up in IPI systems to prevent premature battery failure or leaking.</li> </ol>

# 16 Reference Materials

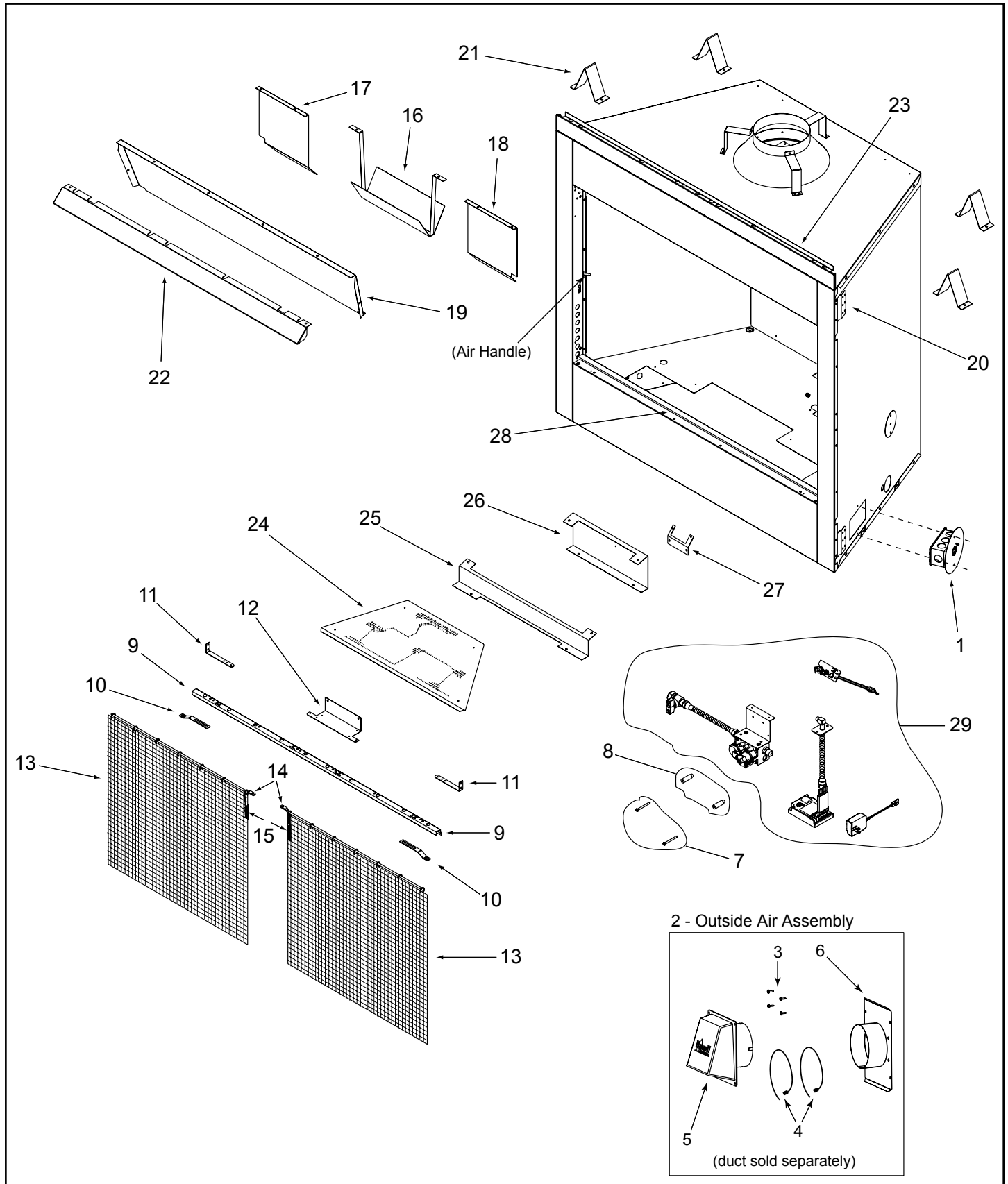
## A. Appliance Dimension Diagram

Dimensions are actual appliance dimensions. Use for reference only. For framing dimensions and clearances refer to Section 3.



Model		A	B	C
RBV4236	<i>in.</i>	41	36	23-3/4
	<i>mm</i>	1041	914	603
RBV4842	<i>in.</i>	47	42	29-3/4
	<i>mm</i>	1194	1067	756

**This page intentionally left blank.**

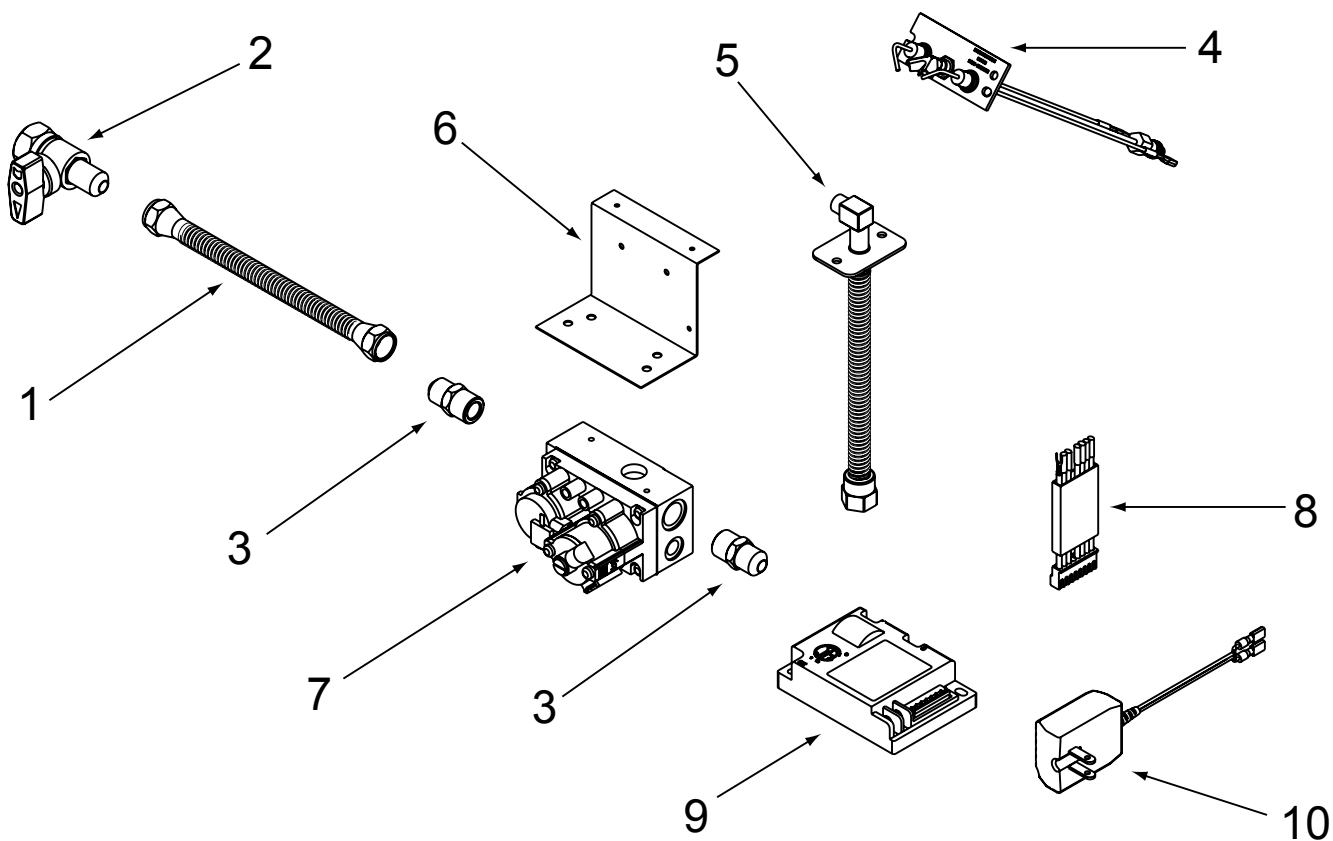




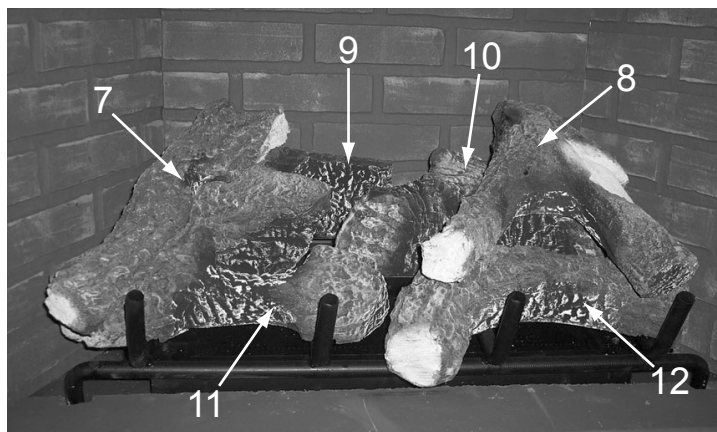
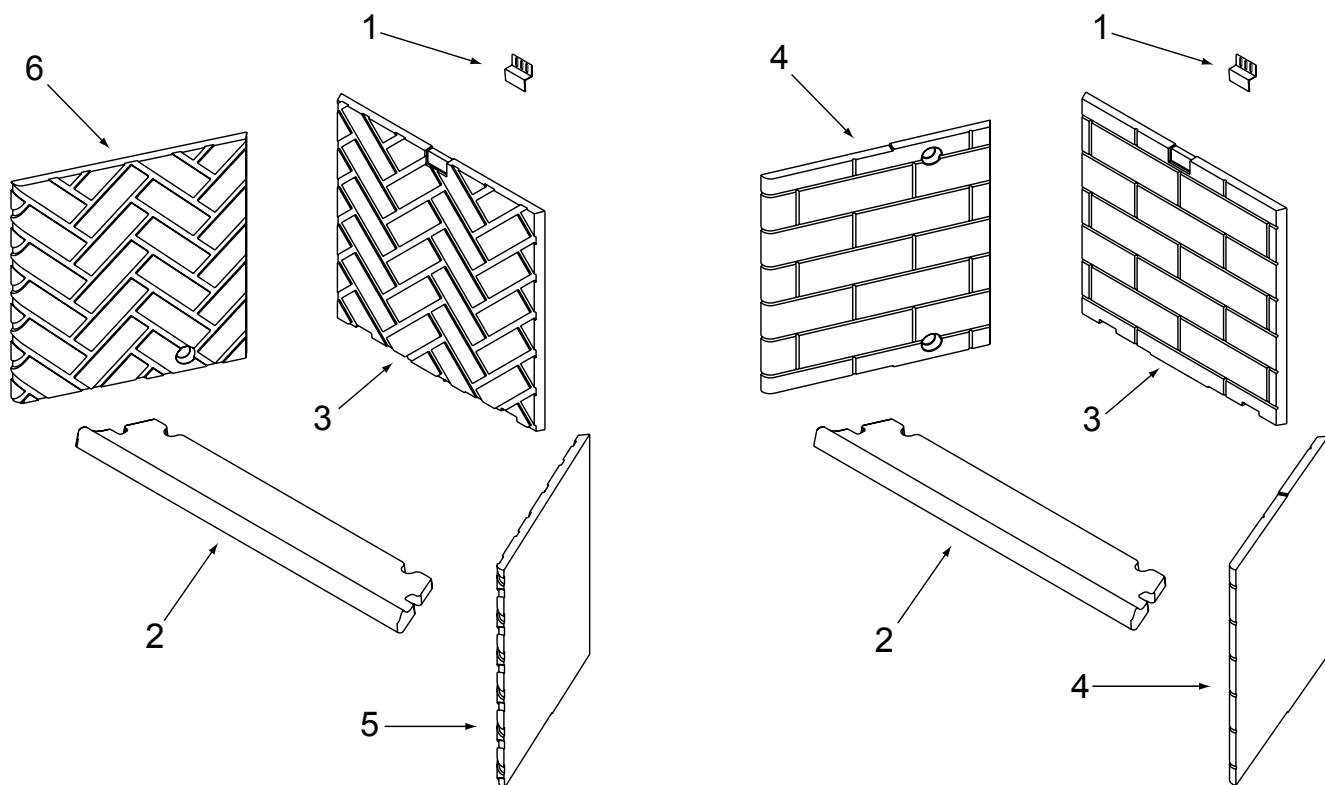
Service Parts List  
36 in. and 42 in. REVEAL Gas Fireplace - BV  
(parts listed in bold italics are critical parts)

Beginning Manufacturing Date: N/A  
Ending Manufacturing Date: Active

#	Description of Part	RBV4236IT	RBV4236IH	RBV4842IT	RBV4842IH	Qty. req.
1	Junction Box Kit	31581	31581	31581	31581	1
	Junction Box	21878	21878	21878	21878	1
2	Outside Air Assembly	4044-009	4044-009	4044-009	4044-009	1
3	Fastener Pack	12010B	12010B	12010B	12010B	1
4	Long Cable Tie	19954B	19954B	19954B	19954B	2
5	Outside Air Shield	33271	33271	33271	33271	1
6	Outside Air Plate Assembly	4044-031	4044-031	4044-031	4044-031	1
7	Door Pin Screw	4021-384	4021-384	4021-384	4021-384	2
8	Door Pin	4021-385	4021-385	4021-385	4021-385	2
9	Door Track	15425	15425	15427	15427	1
10	Door Pivot Clip	31527	31527	31527	31527	2
11	Upper Door Bracket	4048-142	4048-142	4048-142	4048-142	2
	Hair Pin Clip	101025	101025	101025	101025	2
12	Screen Bracket	4048-169	4048-169	4048-169	4048-169	1
13	<b>Firescreen Assembly</b>	<b>4048-018</b>	<b>4048-018</b>	<b>4048-019</b>	<b>4048-019</b>	2
14	Firescreen Rod	11866B	11866B	12052	12052	1 ea.
15	Firescreen Handle	4021-150	4021-150	4021-150	4021-150	1 ea.
16	Flue Baffle Assembly	4048-020	4048-020	4048-020	4048-020	1
17	Left Baffle	4048-117	4048-117	4048-115	4048-115	1
18	Right Baffle	4048-118	4048-118	4048-116	4048-116	1
19	Smoke Shield	4048-127	4048-127	4048-128	4048-128	1
20	Nailing Flange	4044-161	4044-161	4044-161	4044-161	4
21	Top Standoff	4044-111	4044-111	4044-111	4044-111	4
22	Hood	29575	29575	29576	29576	1
23	Drywall Lip	4048-161	4048-161	4048-162	4048-162	1
24	<b>Burner Pan Assembly - NG</b>	<b>4048-024</b>	<b>4048-024</b>	<b>4048-024</b>	<b>4048-024</b>	1
	<b>Burner Pan Assembly - LP</b>	<b>4048-025</b>	<b>4048-025</b>	<b>4048-025</b>	<b>4048-025</b>	1
25	Front Burner Support	4048-137	4048-137	4048-137	4048-137	1
26	Back Burner Support	4048-138	4048-138	4048-138	4048-138	1
27	Pilot Bracket	4048-136	4048-136	4048-136	4048-136	1
28	Hearth Retainer	4044-128	4044-128	4044-109	4044-109	1
29	Valve Assembly	4048-014	4048-014	4048-014	4048-014	
	Lava Rock Bag Assembly	4040-094	4040-094	4040-094	4040-094	1
	Mineral Wool	14333B	14333B	14333B	14333B	1
	Vermiculite	28746	28746	28746	28746	1
	Lava Rock (3 lbs.)	4021-297	4021-297	4021-297	4021-297	1
	Installation Instructions & Owner's Manual	4048-210	4048-210	4048-210	4048-210	1
	Gas Operations Manual	71680	71680	71680	71680	1
	Damper Kit	DG3	DG3	DG3	DG3	1







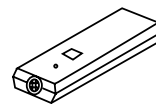
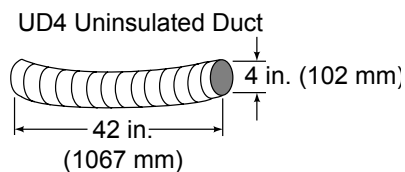
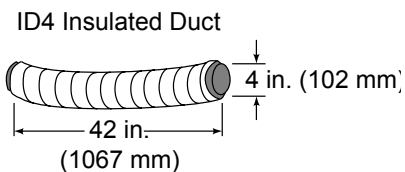
# RBV4236 & RBV4842

## Service Parts List

### 36 in. and 42 in. REVEAL Gas Fireplace - BV (parts listed in bold italics are critical parts)

[illegible]

## C. Optional Components



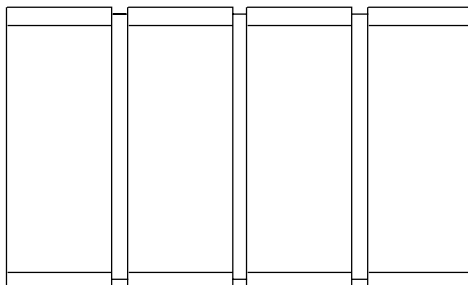
**RC-SMART-HTL**  
Remote Control  
**RC-BATT-HTL**  
Battery Operated Remote Control  
(Standing Pilot)  
**SMART-STAT-HTL**  
Remote control with Thermostat Control  
**SMART-BATT-HTL**  
Battery-operated Remote Control  
with Thermostat Control

**DCKP-RBV**  
NG to LP Gas Conversion Kit

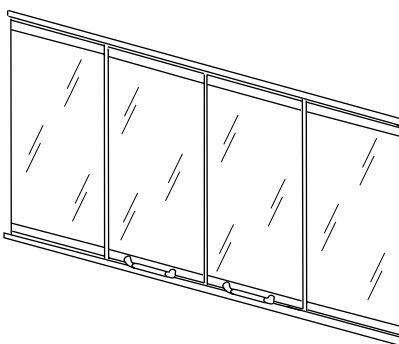
**DCKN-RBV**  
LP to NG Gas Conversion Kit

**WSK100-HTL**  
Wall Switch

**DG3**  
Thermally Activated  
Automatic Damper



**DM1036, DM1036B, DM1036S**  
**DM1042, DM1042B, DM1042S**  
Bifold Doors



**DF361B**  
**DF421B**  
Fixed Glass Doors

## D. Limited Lifetime Warranty



### Gas Appliance (Fireplace) Limited Lifetime Warranty

**HEARTH & HOME TECHNOLOGIES INC. ("HHT")** extends the following warranty for HEATILATOR® gas appliances installed in the United States of America or Canada (the "Appliance"). Dealers and employees of HHT have no authority to make any warranty or authorize any remedies in addition to or inconsistent with the terms of this warranty.

#### Limited Lifetime Warranty

HHT warrants the Appliance for component failure due to a manufacturing defect of any of the following components: combustion chamber, burner pan, and logs. The Limited Lifetime Warranty specified above is subject to the conditions, exclusions and limitations listed below, is for the period the Appliance is owned by the original homeowner only, and is nontransferable.

#### 1 Year Limited Warranty

HHT warrants the Appliance to be free from failure of any of the following components for a period of one year after installation: valve, flexible gas line connector, glass panel, fan, direct vent chimney components, factory paint, gasket, piezo ignitor, thermopile, thermocouple, junction box, pilot assembly, shutoff valve, high limit switch, refractory liners, transformer, and control box. If the Heatilator Appliance is found to be defective in either material or workmanship within one year of the date of original installation, HHT will provide replacement parts at no charge and pay reasonable labor and freight costs, and is for the period of one year following the date of original installation of the Appliance.

#### Conditions, Exclusions, & Limitations of Liability

- A. Both the Limited Lifetime and 1 Year Limited Warranties supplied by HHT apply only while the Appliance is in its location of original installation. HHT's obligation under this warranty does not extend to damages resulting from (1) installation, operation or maintenance of the Appliance not in accordance with the Installation Instructions, Operating Instructions, and the Listing Agent Identification Label furnished with the Appliance; (2) installation which does not comply with local building codes; (3) shipping, improper handling, improper operation, abuse, misuse, accident or unworkmanlike repairs; (4) environmental conditions, inadequate ventilation or drafting caused by tight sealing construction of the structure, air handling devices such as exhaust fans or forced air furnaces, or other causes; (5) use of fuels other than those specified in the Operating Instructions; (6) installation or use of components not supplied with the Appliance or any other components not expressly authorized and approved by HHT; and/or (7) modification of the Appliance not expressly authorized and approved by HHT in writing. This warranty is limited to only the component parts manufactured or supplied by HHT.
- B. HHT's liability under both the Limited Lifetime Warranty and the 1 Year Limited Warranty is limited to the replacement and repair of defective components or workmanship during the applicable period. HHT may fully discharge all of its obligations under such warranties by repairing the defective component(s) or at HHT's discretion, providing replacement parts at no charge and paying reasonable labor and freight costs.
- C. **EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE WARRANTY SPECIFIED ABOVE.**
- D. Some states do not allow exclusions or limitations of incidental or consequential damages, so those limitations may not apply to you. This warranty gives you specific rights; you may also have other rights which vary from state to state.

#### How to Obtain Service

To obtain service under this warranty you must:

- 1. Send written notice of the claimed condition to Heatilator Technical Service Department, Hearth & Home Technologies, 1915 W. Saunders Street, Mt. Pleasant, Iowa 52641-1563. You may also register your claim online at [www.heatilator.com](http://www.heatilator.com).
- 2. Provide proof of purchase, model number, serial number, and manufacturing date code to HHT.
- 3. Provide HHT reasonable opportunity to investigate the claim, including reasonable opportunity to inspect the Appliance prior to any repair or replacement work and before the Appliance or any component of the Appliance has been removed from the place of original installation.
- 4. Obtain HHT's consent to any warranty work before the work is done.

#### ADDITIONAL INFORMATION:

If you would like information on current HEATILATOR products or want to locate a dealer in your area, call 1-800-927-6841.

©2003 Heatilator® is a Registered Trademark of Hearth & Home Technologies Inc.

## E. Contact Information



Hearth & Home Technologies Inc.  
1915 W. Saunders Street  
Mt. Pleasant, Iowa 52641  
[www.heatilator.com](http://www.heatilator.com)

**Please contact your Heatilator dealer with any questions or concerns.**

For the number of your nearest Heatilator dealer, please visit [www.heatilator.com](http://www.heatilator.com).

### - NOTES -

---

---

---

---

---


---


---

---

---

---

CAUTION		
	<b>DO NOT DISCARD THIS MANUAL</b>	
	Important operating and maintenance instructions included.	Read, understand and follow these instructions for safe installation and operation.



This product may be covered by one or more of the following patents: (United States) 4593510, 4686807, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429495, 5452708, 5542407, 5601073, 5613487, 5647340, 5688568, 5762062, 5775408, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543698, 6550687, 6601579, 6672860, 6688302B2, 6715724B2, 6729551, 6736133, 6748940, 6748942, 6769426, 6774802, 6796302, 6840261, 6848441, 6863064, 6866205, 6869278, 6875012, 6880275, 6908039, 6919884, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408, 2313972; (Australia) 780250, 780403, 1418504 or other U.S. and foreign patents pending.