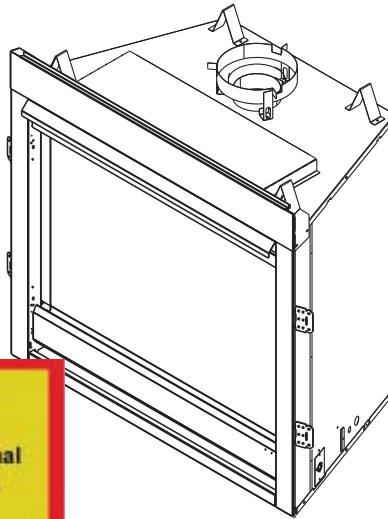


Model(s):

CB4236MIR

CB4842MIR

B-Vent Gas Appliance



GAS-FIRED



This appliance has been retired.
Service parts pages within have been removed.
For replacement parts, please refer to the individual
service parts list located on the brand websites.

NOTICE



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.

**DO NOT
DISCARD**

⚠ WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury, or death.

- **DO NOT** store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **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.

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.

⚠ WARNING



HOT SURFACES!

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

Hot glass will cause burns.

- **DO NOT** touch glass until it is cooled
 - NEVER allow children to touch glass
 - Keep children away
 - CAREFULLY SUPERVISE children in same room as fireplace.
 - Alert children and adults to hazards of high temperatures.
- High temperatures may ignite clothing or other flammable materials.**
- Keep clothing, furniture, draperies and other flammable materials away.

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the appliance with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

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.

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

A. Congratulations

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

As the owner of a new fireplace, 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 that 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 fireplace will give you years of durable use and trouble-free enjoyment. Welcome to the Heatilator family of fireplace products!

Homeowner Reference Information

We recommend that you record the following pertinent information about your fireplace.

Model Name: _____ Date purchased/installed: _____

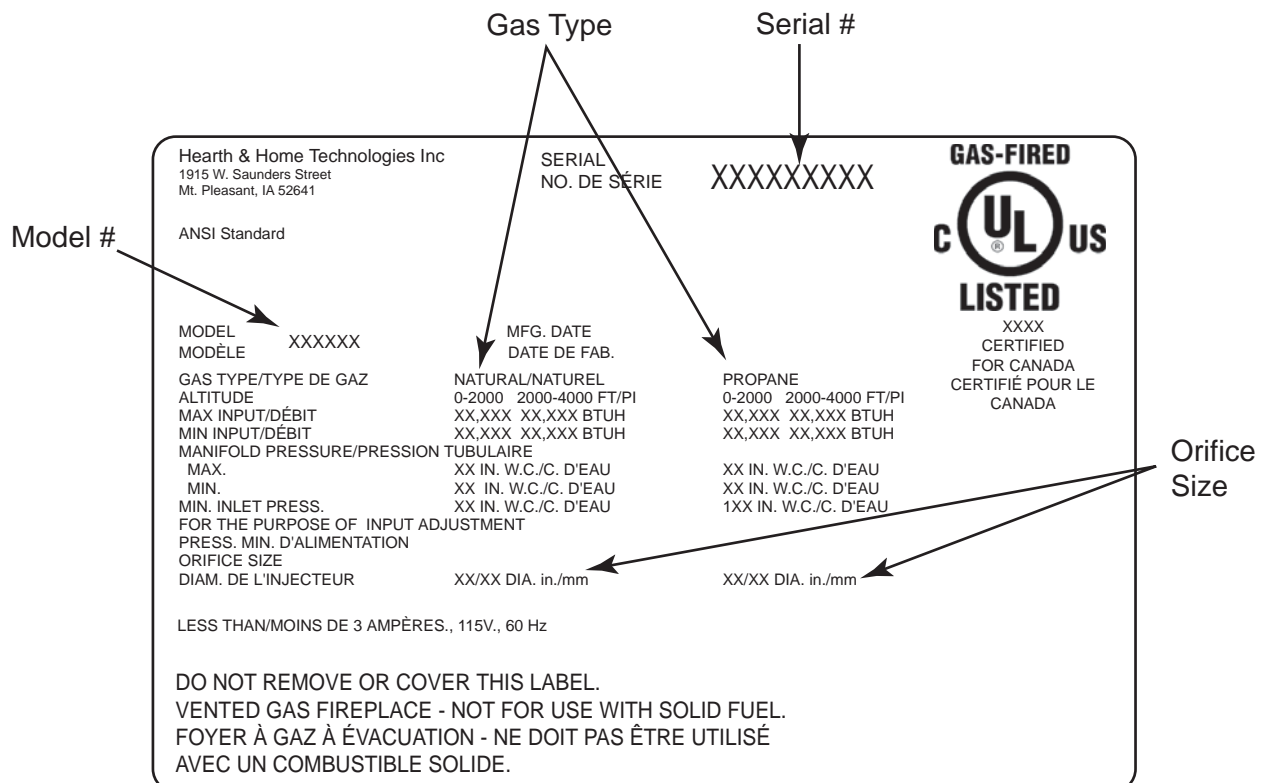
Serial Number: _____ Location on fireplace: _____

Dealership purchased from: _____ Dealer Phone: _____

Notes: _____

Listing Label Information/Location

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



▲ Safety Alert Key:

- **DANGER!** Indicates a hazardous situation which, if not avoided will result in death or serious injury.
- **WARNING!** Indicates a hazardous situation which, if not avoided could result in death or serious injury.
- **CAUTION!** Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
- **NOTICE:** Used to address practices not related to personal injury.

Table of Contents

A. Congratulations	2	6 Termination Locations	
B. Warranty	5	A. Vent Termination Minimum Clearances	20
1 Listing and Code Approvals		7 Vent Information and Diagrams	
A. Appliance Certification	7	A. Vent Guidelines	21
B. Tempered Glass Specifications	7	B. Vent System Configuration	21
C. BTU Specifications	7	8 Vent Clearances and Framing	
D. High Altitude Installations	7	A. Pipe Clearances to Combustibles	22
E. Non-Combustible Materials Specification	7	B. Wall and Ceiling Penetration Framing	22
F. Combustible Materials Specification	7	C. Vertical Penetration Framing	22
G. Electrical Codes	7	9 Appliance Preparation	
		A. Install Outside Air Kit Damper Assembly	23
User Guide		B. Gas and Electrical Connections	23
		C. Secure and Level the Appliance	23
2 Operating Instructions		10 Installing Vent Pipe	
A. Gas Fireplace Safety	8	A. Assembly of Vent Sections	24
B. Your Fireplace	8	B. Attach Vent to Firebox	24
C. Fan Kit (optional)	9	C. Secure Vent Sections	24
D. Clear Space	9	D. Install Attic Insulation Shield	24
E. Decorative Doors and Fronts	9	11 Gas Information	
F. Fixed Glass Assembly	9	A. Fuel Conversion	25
G. Remote Controls, Wall Controls and Wall Switches	9	B. Gas Pressure	25
H. Outside Air (optional)	9	C. Gas Connection	25
I. Before Lighting Fireplace	9	D. High Altitude Installations	25
J. Lighting Instructions (IPI)	10	12 Electrical Information	
K. After Fireplace is Lit	11	A. Wiring Requirements	26
L. Frequently Asked Questions	11	B. Intellifire Ignition System Wiring	26
3 Maintenance and Service		C. Optional Accessories Requirements	26
A. Maintenance Tasks-Homeowner	12	D. Electrical Service and Repair	26
B. Maintenance Tasks-Qualified Service Technician	13	E. Junction Box Installation	27
		F. Wall Switch Installation for Fan (Optional)	27
Installer Guide		13 Finishing	
4 Getting Started		A. Mantel and Wall Projections	28
A. Typical Appliance System	14	B. Facing Material	28
B. Design and Installation Considerations	15		
C. Tools and Supplies Needed	15		
D. Inspect Appliance and Components	15		
E. Negative Pressure	16		
5 Framing and Clearances			
A. Selecting Appliance Location	17		
B. Constructing the Appliance Chase	17		
C. Clearances	18		
D. Mantel and Wall Projections	19		

14 Appliance Setup

A. Remove Glass Assembly	29
B. Remove the Shipping Materials	29
C. Clean the Appliance	29
D. Accessories	29
E. Install the Refractory	29
F. Place the Lava Rock & Vermiculite	29
G. Place the Rockwool	29
H. Install the Log Assembly	30
I. Glass Assembly	30
J. Install Trim	31
K. Install Clean Face Components	31
L. Air Shutter Setting	32

15 Troubleshooting

A. Intellifire Ignition System	33
--------------------------------	----

16 Reference Materials

A. Appliance Dimension Diagram	35
B. Service Parts List	36
C. Optional Components	39
D. Contact Information	44

➔ = Contains updated information.

→ B. Warranty

Hearth & Home Technologies LIMITED WARRANTY

Hearth & Home Technologies ("HHT") and its respective brands extends the following warranty for HHT gas, wood, pellet and electric appliances purchased from an authorized HHT dealer and installed in the United States of America or Canada. Warranty starts with date of purchase by the original owner (End User) except as noted for replacement parts.

Warranty Period		HHT Manufactured Appliances and Venting						Components Covered
Parts	Labor	Gas	Wood	Pellet	EPA Wood	Electric	Venting	
1 Year		X	X	X	X	X	X	All Parts and Material Except as covered by Conditions, Exclusion, and Limitations listed
2 years				X	X			Igniters, Electronic Components, and Glass
		X	X	X	X			Blowers
			X					Molded Refractory Panels
3 years				X				Firepots
5 years	3 years			X	X			Castings & Baffles
7 years	3 years		X	X	X			Firebox, HHT Chimney, Termination & Heat Exchanger
10 years	1 year	X						Burners, Logs & Refractory
Limited Lifetime	1 year	X						Firebox & Heat Exchanger
90 Days		X	X	X	X	X	X	All Replacement Parts
See Conditions, Exclusions, and limitations.						9-01-08		

CONDITIONS, EXCLUSIONS & LIMITATION OF LIABILITY

- This warranty applies to the original owner and is transferable up to two years from date of purchase to the new homeowner, provided the purchase was made through an authorized dealer or distributor of HHT, and the appliance remains in its original place of installation.
- The maximum amount recoverable under this warranty is limited to the purchase price of the product.
- In no event shall HHT be liable for any incidental or consequential damages caused by defects in the product.
- Adjustments, regular maintenance, cleaning and temporary repairs, or the failure to duplicate the problem in the home is not covered under this warranty.

B. Warranty (*continued*)

This limited warranty does not extend to or include surface finish on the appliance or terminations, door gasketing, glass gasketing, glass discoloration, firebrick, pellet logs, kaowool or other ceramic insulating materials. Rust and/or corrosion on any of the metal surfaces, cast iron components, baffles, firepots, doors, or firebox area are not covered by this warranty.

- Noise resulting from minor expansion, contraction, or movement of certain parts is normal and complaints related to this noise are not covered by this warranty.
- 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 or handling devices such as exhaust fans or forced air furnaces or other such 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 does not apply to non-HHT venting components, hearth components or other accessories used in conjunction with the installation of this product.
- This warranty is void if the appliance has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals the appliance is subject to prolonged periods of dampness or condensation, or there is any damage to the appliance or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.
- HHT's liability under this 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) at HHT's discretion. Shipping costs are not covered under this warranty.
- Some states do not allow exclusions or limitation 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.
- 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.

This Limited Warranty is effective on all HHT appliances sold after September 01, 2008 and supersedes any and all warranties currently in existence.

If warranty service is needed, you should contact your installing dealer. If the installing dealer is unable to provide necessary parts or components, contact the nearest authorized HHT dealer or supplier.

1 Listing and Code Approvals

A. Appliance Certification

MODELS: CB4236MIR, CB4842MIR

LABORATORY: Underwriters Laboratories, Inc. (UL)

TYPE: B-Vent Gas Appliance Heater

STANDARD: ANSI Z21.88-2005/CSA 2.33-2005

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

This model may be installed in a sleeping room when the provisions for combustion, ventilation and dilution air are met per the requirements of **ANSI 223.1/NFPA 54 National Fuel Gas Code**. In Canada, installation in a sleeping room requires installation with a thermostat certified for use with this product. Consult your local authorities having jurisdiction.

NOTICE: *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.*

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. Tempered 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.

C. BTU Specifications

Caliber Mesh BV Series	CB4236M	CB4842M
IPI		
Max/Min Input Rate (NG)	30,000/20,000	33,000/22,000
Orifice Size (NG)	.101 in./2.56 mm	.104 in./2.64 mm
Max/Min Input Rate (LP)	29,500/19,500	32,500/20,000
Orifice Size (LP)	.0635 in./1.61 mm	.065 in./1.65 mm

D. High Altitude Installations

NOTICE: *If the heating value of the gas has been reduced, these rules do not apply. Check with your local gas utility or authorities having jurisdiction.*

When installing above 2000 feet elevation:

- In the USA: Reduce input rate 4% for each 1000 feet above 2000 feet.
- In CANADA: Reduce input rate 10% for elevations between 2000 feet and 4500 feet. Above 4500 feet, consult local gas utility.

Check with your local gas utility to determine proper orifice size.

E. Non-Combustible Materials Specification

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 and UL763 shall be considered non-combustible materials.

F. Combustible Materials Specification

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 plastered or unplastered shall be considered combustible materials.

→ G. Electrical Codes

NOTICE: *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 C22.1**.*

- A 110-120 VAC circuit for this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks.

2 Operating Instructions

User Guide

A. Gas Fireplace Safety

⚠ WARNING



HOT SURFACES!

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

Hot glass will cause burns.

- **DO NOT** touch glass until it is cooled
- **NEVER** allow children to touch glass
- Keep children away

- **CAREFULLY SUPERVISE** children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.

High temperatures may ignite clothing or other flammable materials.

- Keep clothing, furniture, draperies and other flammable materials away.

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the appliance with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

If you expect that small children or vulnerable adults may come into contact with this fireplace, the following precautions are recommended:

- Install a physical barrier such as:
 - A decorative firescreen.
 - Adjustable safety gate.
- Install a switch lock or a wall/remote control with child protection lockout feature.
- Keep remote controls out of reach of children.

- Never leave children alone near a hot fireplace, whether operating or cooling down.
- Teach children to **NEVER** touch the fireplace.
- Consider not using the fireplace when children will be present.

Contact your dealer for more information, or visit: www.hpba.org/staysafe.

To prevent unintended operation when not using your fireplace for an extended period of time (summer months, vacation, trips, etc):

- Remove batteries from remote controls.
- Turn off wall controls.
- Unplug 3 volt adapter plug and remove batteries on IPI models.
- Turn off gas controls valve on standing pilot models.

When lighting the pilot light on fireplaces with a standing pilot, remove the fixed glass assembly so you can detect presence of residual gas build-up. See Standing Pilot Lighting instructions and Maintenance Tasks.

B. Your Fireplace

WARNING! DO NOT operate fireplace before reading and understanding operating instructions. Failure to operate fireplace according to operating instructions could cause fire or injury.

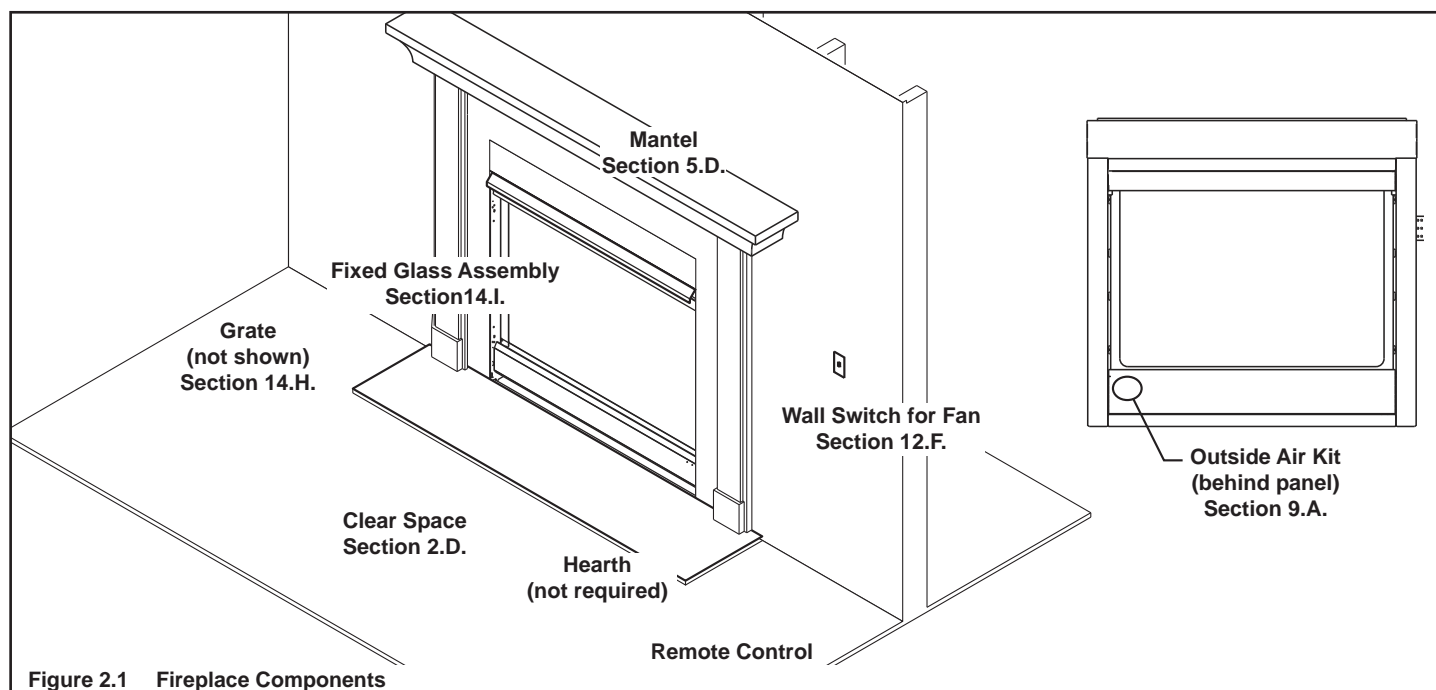


Figure 2.1 Fireplace Components

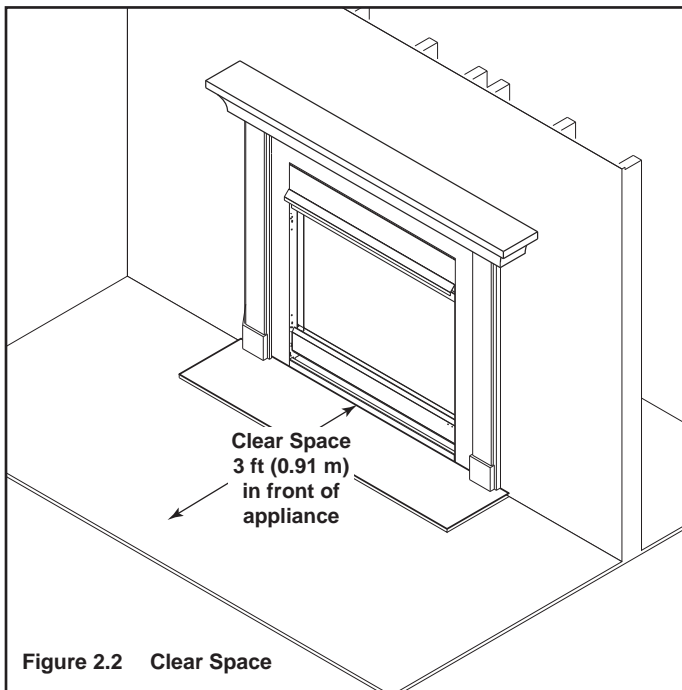
C. Fan Kit (optional)

- Refer to Figure 2.1 for location of control.

D. Clear Space

WARNING! DO NOT place combustible objects in front of the fireplace or block louvers. High temperatures may start a fire. See Figure 2.2.

Avoid placing candles and other heat-sensitive objects on mantel or hearth. Heat may damage these objects.



E. Decorative Doors and Fronts

WARNING! Risk of Fire! Install **ONLY** doors or fronts approved by Hearth & Home Technologies. Unapproved doors or fronts may cause fireplace to overheat.

This fireplace has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the fireplace with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

For more information refer to the instructions supplied with your decorative door or front.

F. Fixed Glass Assembly

See Section 14.I.

G. Remote Controls, Wall Controls and Wall Switches

Follow the instructions supplied with the control installed to operate your fireplace:

For safety:

- Install a switch lock or a wall/remote control with child protection lockout feature.
- Keep remote controls out of reach of children.

See your dealer if you have questions.

H. Outside Air (optional)

The outside air kit supplies some fresh combustion air for your fireplace. It may help reduce the effects of negative air pressure. (See Section 9.A.)

- Refer to Figure 2.1 for location of control.
- Close the inlet to prevent cold drafts when the fireplace is not being used.

CAUTION! Risk of Burns! The outside air control handle is **HOT** when fireplace is in operation. Adjust **BEFORE** lighting fire.

I. Before Lighting Fireplace


Before operating this fireplace for the first time, **have a qualified service technician:**

- Verify all shipping materials have been removed from inside and/or underneath the firebox.
- Review proper placement of logs, ember material and/or other decorative materials.
- Check the wiring.
- Check the air shutter adjustment.
- Ensure that there are no gas leaks.
- Ensure that the glass is sealed and in the proper position and that the integral barrier is in place.

WARNING! RISK OF Fire/Asphyxiation! DO NOT operate fireplace with fixed glass assembly removed.

J. Lighting Instructions (IPI)

- For normal use, activate/deactivate your fireplace with the wall switch or remote control.
- The IPI system may be operated with two D-cell batteries. When using batteries, unplug the transformer. To prolong battery life, remove them when using the transformer.
- If your fireplace must be deactivated for serviced or an extended period of time, follow the instructions below.

 FOR YOUR SAFETY READ BEFORE LIGHTING		<p>This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.</p>
<p>WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.</p>		<p>This appliance must be installed in accordance with local codes, if any; if not, follow ANSI Z223.1 or, in Canada, current CAN/CGA-B149.</p>
<p>A. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.</p> <p>B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.</p> <p>WHAT TO DO IF YOU SMELL GAS</p> <ul style="list-style-type: none"> • 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. <p>C. Use only your hand to push in and move the gas control valve or turn the gas control knob. Never use tools. If the lever or knob will not move by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.</p> <p>D. 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.</p>		<p>This appliance must be properly connected to a venting system in accordance with the manufacturer's installation instructions.</p>
<p>WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with the appliance. For assistance or additional information consult a qualified installer, service agency or the gas supplier.</p>		
<p>CAUTION: Hot while in operation. Do not touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.</p>		
<p>WARNING RISK OF FIRE</p> <p>This appliance is intended to burn a specified gas fuel only. Do not attempt to use with solid wood fuel or another type of fuel. Do not attempt to modify or use any other type of gas burner system.</p>		
<p>WARNING: Disconnect the electric power before servicing. If for any reason the original wire supplied with the appliance must be replaced, it must be replaced with 105° C or its equivalent.</p>		
<p>For use with natural gas or propane. A conversion kit as supplied by the manufacturer shall be used to convert this appliance to the alternative fuel.</p>		
<p>* Also certified for installation in a bedroom or a bed-sitting room.</p> <p>* For U.S. only!</p>		
<p>NATURAL GAS</p>		
<p>Due to high surface temperatures, keep children, clothing and furniture away. Keep burner and control compartment clean. See installation and operating instructions accompanying the appliance.</p>		
<p>33631D</p>		

K. After Fireplace is Lit

Initial Break-in Procedure

- The fireplace should be run three to four hours continuously on high.
- Turn the fireplace off and allow it to completely cool.
- Remove fixed glass assembly. See Section 14.I.
- Clean fixed glass assembly. See Section 3.
- Replace the fixed glass assembly and run continuously on high an additional 12 hours.

This cures the materials used to manufacture the fireplace.

NOTICE! Open windows for air circulation during fireplace break-in.

- Some people may be sensitive to smoke and odors.
- Smoke detectors may activate.

L. Frequently Asked Questions

ISSUE	SOLUTIONS
Condensation on the glass	This is a result of gas combustion and temperature variations. As the fireplace warms, this condensation will disappear.
Blue flames	This is a result of normal operation and the flames will begin to yellow as the fireplace is allowed to burn for 20 to 40 minutes.
Odor from fireplace	When first operated, this fireplace may release an odor for the first several hours. This is caused by the curing of materials from manufacturing. Odor may also be released from finishing materials and adhesives used near the fireplace. These circumstances may require additional curing related to the installation environment.
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. A non-abrasive cleaner such as gas appliance 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.

3 Maintenance and Service

Any safety screen or guard removed for servicing must be replaced prior to operating the fireplace.

When properly maintained, your fireplace will give you many years of trouble-free service. We recommend annual service by a qualified service technician.

A. Maintenance Tasks-Homeowner

Installation and repair should be done by a qualified service technician only. The fireplace should be inspected before use and at least annually by a professional service person.

The following tasks may be performed annually by the homeowner. If you are uncomfortable performing any of the listed tasks, please call your dealer for a service appointment.

More frequent cleaning may be required due to lint from carpeting or other factors. Control compartment, burner and circulating air passageway of the fireplace must be kept clean.

CAUTION! Risk of Burns! The fireplace should be turned off and cooled before servicing.

Glass Cleaning

Frequency: Seasonally

By: Homeowner

Tools Needed: Protective gloves, glass cleaner, drop cloth and a stable work surface.

CAUTION! Handle fixed glass assembly with care. Glass is breakable.

- Avoid striking, scratching or slamming glass
- Avoid abrasive cleaners
- **DO NOT** clean glass while it is hot
- Prepare a work area large enough to accommodate fixed glass assembly and door frame by placing a drop cloth on a flat, stable surface.

Note: Fixed glass assembly and gasketing may have residue that can stain carpeting or floor surfaces.

- Remove door or decorative front from fireplace and set aside on work surface.
- See Section 14.I. for instructions to remove fixed glass assembly.
- Clean glass with a non-abrasive commercially available cleaner.
 - Light deposits: Use a soft cloth with soap and water
 - Heavy deposits: Use commercial fireplace glass cleaner (consult with your dealer)
- Carefully set fixed glass assembly in place on fireplace. Hold glass in place with one hand and secure glass latches with the other hand.
- Reinstall door or decorative front.

Doors, Surrounds, Fronts

Frequency: Annually

By: Homeowner

Tools needed: Protective gloves, stable work surface

- Assess condition of screen and replace as necessary.
- Inspect for scratches, dents or other damage and repair as necessary.
- Check that louvers are not blocked.
- Vacuum and dust surfaces.

Remote Control

Frequency: Seasonally

By: Homeowner

Tools needed: Replacement batteries and remote control instructions.

- Locate remote control transmitter and receiver.
- Verify operation of remote. Refer to remote control operation instructions for proper calibration and setup procedure.
- Place batteries as needed in remote transmitters and battery-powered receivers.
- Place remote control out of reach of children.

If not using your fireplace for an extended period of time (summer months, vacations/trips, etc), to prevent unintended operation:

- Remove batteries from remote controls.
- Unplug 3 volt adapter plug on IPI models.

Venting

Frequency: Seasonally

By: Homeowner

Tools needed: Protective gloves and safety glasses.

- Inspect venting and termination cap for blockage or obstruction such plants, bird nests, leaves, snow, debris, etc.
- Verify termination cap clearance to subsequent construction (building additions, decks, fences, or sheds). See Section 6.
- Inspect for corrosion or separation.
- Verify weather stripping, sealing and flashing remains intact.
- Inspect draft shield to verify it is not damaged or missing.

B. Maintenance Tasks-Qualified Service Technician

The following tasks must be performed by a qualified service technician.

Gasket Seal and Glass Assembly Inspection

Frequency: Annually

By: Qualified Service Technician

Tools needed: Protective gloves, drop cloth and a stable work surface.

- Inspect gasket seal and its condition.
- Inspect fixed glass assembly for scratches and nicks that can lead to breakage when exposed to heat.
- Confirm there is no damage to glass or glass frame. Replace as necessary.
- Verify that fixed glass assembly is properly retained and attachment components are intact and not damaged. Replace as necessary.

Logs

Frequency: Annually

By: Qualified Service Technician

Tools needed: Protective gloves.

- Inspect for damaged or missing logs. Replace as necessary. Refer to Section 14.H. for log placement instructions.
- Verify correct log placement and no flame impingement causing sooting. Correct as necessary.

Firebox

Frequency: Annually

By: Qualified Service Technician

Tools needed: Protective gloves, sandpaper, steel wool, cloths, mineral spirits, primer and touch-up paint.

- Inspect for paint condition, warped surfaces, corrosion or perforation. Sand and repaint as necessary.
- Replace fireplace if firebox has been perforated.

Control Compartment and Firebox Top

Frequency: Annually

By: Qualified Service Technician

Tools needed: Protective gloves, vacuum cleaner, dust cloths

- 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.
- Remove all foreign objects.
- Verify unobstructed air circulation.

Burner Ignition and Operation

Frequency: Annually

By: Qualified Service Technician

Tools needed: Protective gloves, vacuum cleaner, whisk broom, flashlight, voltmeter, indexed drill bit set, and a manometer.

- Verify burner is properly secured and aligned with pilot or igniter.
- Clean off burner top, inspect for plugged ports, corrosion or deterioration. Replace burner if necessary.
- Replace ember materials with new dime-size pieces. DO NOT block ports or obstruct lighting paths. Refer to Section 14.F. for proper ember placement.
- Verify batteries have been removed from battery back-up IPI systems to prevent premature battery failure or leaking.
- Check for smooth lighting and ignition carryover to all ports. Verify that there is no ignition delay.
- Inspect for lifting or other flame problems.
- Verify air shutter setting is correct. See Section 14 for required air shutter setting. Verify air shutter is clear of dust and debris.
- Inspect orifice for soot, dirt and corrosion. Verify orifice size is correct. See Service Parts List for proper orifice sizing.
- Verify manifold and inlet pressures. Adjust regulator as required.
- Inspect pilot flame pattern and strength. See Figure 3.1 for proper pilot flame pattern. Clean or replace orifice spud as necessary.
- Inspect thermocouple/thermopile or IPI flame sensing rod for soot, corrosion and deterioration. Clean with emery cloth or replace as required.
- Verify that there is not a short in flame sense circuit by checking continuity between pilot hood and flame sense rod. Replace pilot as necessary.

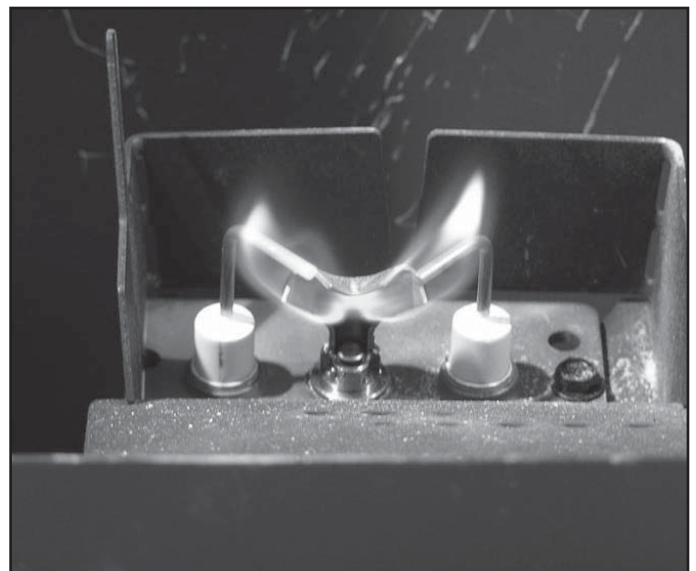


Figure 3.1 IPI Pilot Flame Patterns

4 Getting Started

Installer Guide

A. Typical Appliance System

NOTICE: Illustrations and photos reflect typical installations and are for design purposes only. Illustrations/diagrams are not drawn to scale. Actual product may vary from pictures in manual

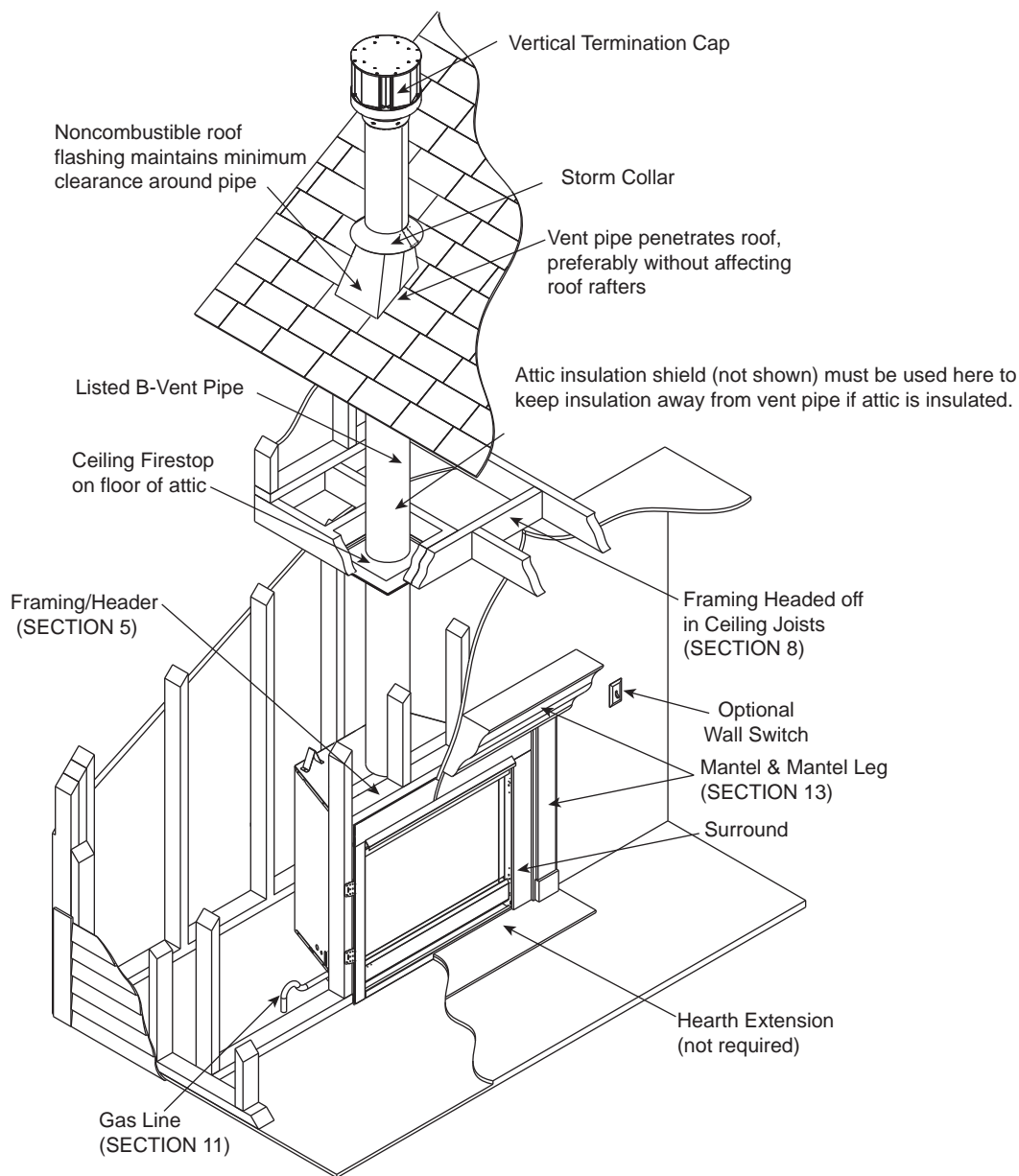


Figure 4.1 Typical System

B. Design and Installation Considerations

Heatilator B-type 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.

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

Before installing, determine the following:

- Where the appliance is to be installed.
- The vent system configuration to be used.
- Gas supply piping.
- Electrical wiring requirements.
- Framing and finishing details.
- Whether optional accessories—devices such as a fan, wall switch, or remote control—are desired.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. For assistance or additional information, consult a qualified service technician, service agency or your dealer.

C. Tools and Supplies Needed

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

Gloves	Safety glasses
Tape measure	Framing material
Pliers	Flat blade screwdriver
Hammer	Phillips screwdriver
Voltmeter	Electric drill and bits (1/4 in.)
Plumb line	Framing square
Level	Reciprocating saw
Manometer	
1/2 - 3/4 in. length, #6 or #8 Self-drilling screws	
High temperature caulking material	
Noncorrosive leak check solution	

D. Inspect Appliance and Components

The following B-vent components are needed for installation.

- Fireplace Box
- 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 decorative doors and fronts may be shipped in separate packages.
- If packaged separately, the log set and appliance grate must be 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! Risk of Fire or Explosion! Damaged parts could impair safe operation. **DO NOT** install damaged, incomplete or substitute components. Keep appliance dry.

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.

WARNING! Risk of Fire, Explosion or Electric Shock! **DO NOT** use this appliance if any part has been under water. Call a qualified service technician to inspect the appliance and to replace any part of the control system and/or gas control which has been under water.

E. Negative Pressure

WARNING! Asphyxiation Risk! Negative pressure can cause spillage of combustion fumes and soot. Fireplace needs to draft properly for safety.

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 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 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 fresh 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 of “sealed can” design; attic hatches weather stripped or sealed; and attic mounted ductwork 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 4.2, the chimney should:

- Be installed through the warm space 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.

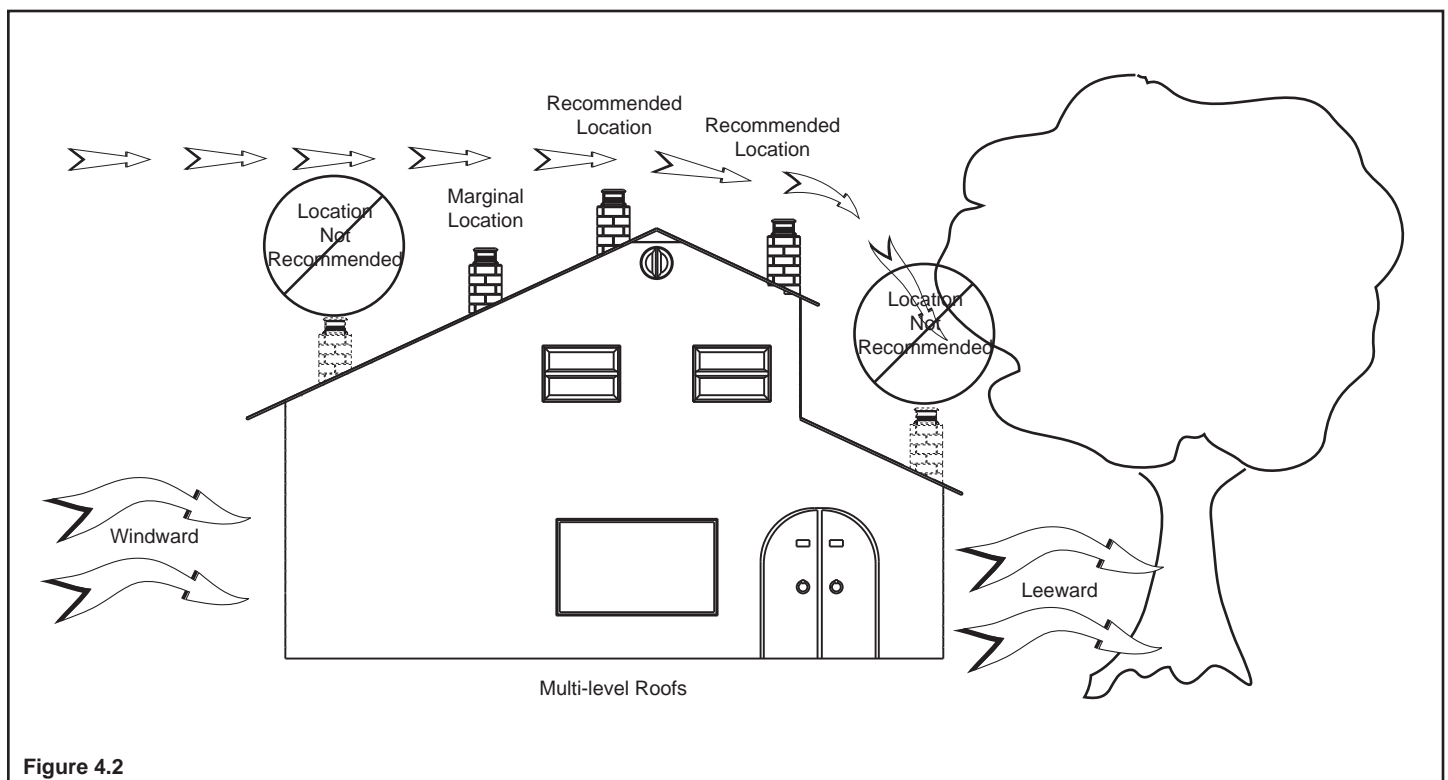


Figure 4.2

5 Framing and Clearances

A. Selecting Appliance Location

When selecting a location for the appliance it is important to consider the required clearances to walls, Figures 5.1 and 5.2.

WARNING! Risk of Fire or Burns! Provide adequate clearance around air openings and for service access. **Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.**

NOTICE: 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.

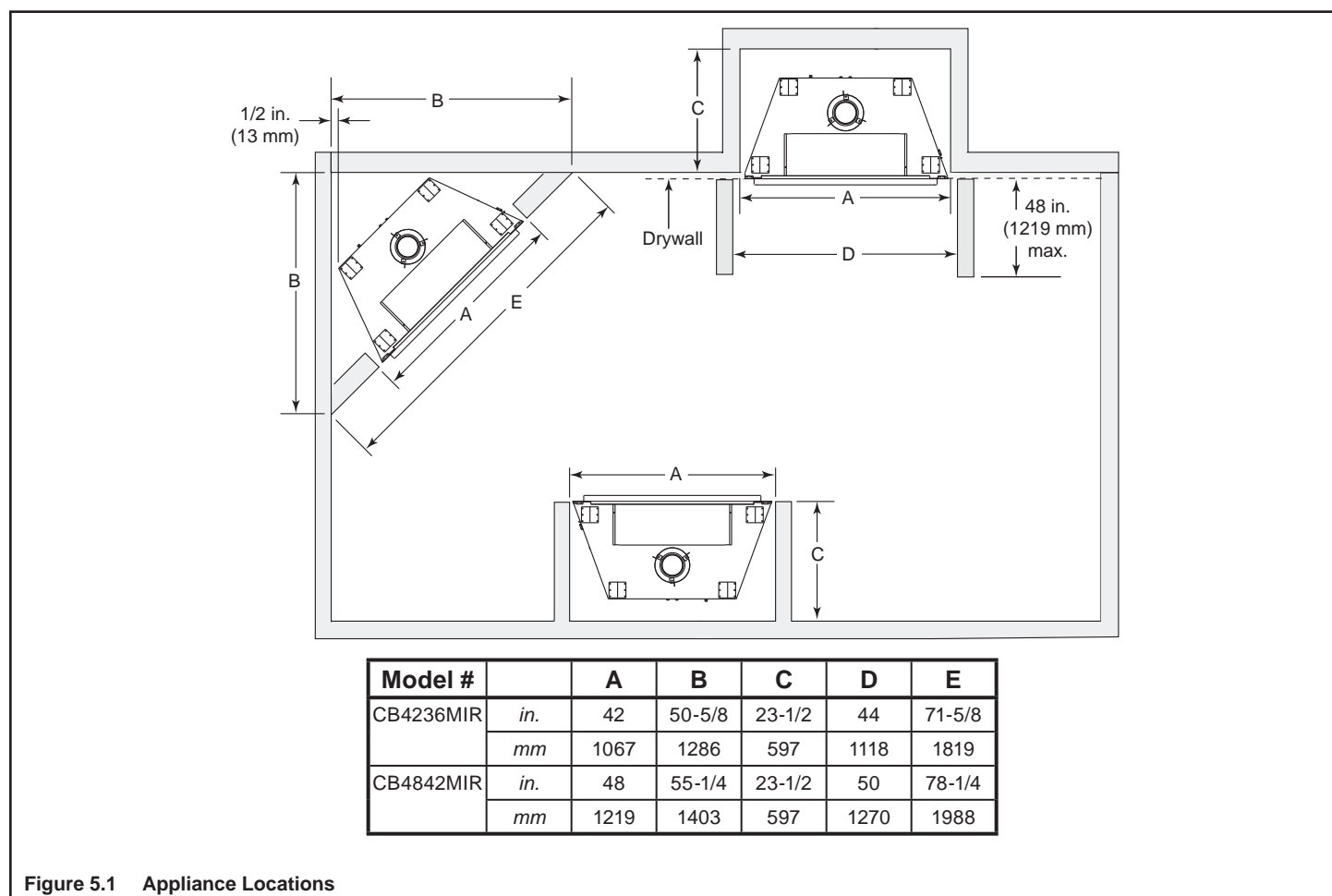


Figure 5.1 Appliance Locations

B. Constructing the Appliance Chase

A chase is a vertical box-like structure built to enclose the gas appliance and/or its vent system. In cooler climates the vent should be enclosed inside the chase.

NOTICE: *Treatment of ceiling firestops and wall shield firestops and construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Therefore, you MUST check local building codes to determine the requirements to these steps.*

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, in regions where cold air infiltration may be an issue, the inside surfaces may be sheetrocked and taped for maximum air tightness. To further prevent drafts, the wall shield and ceiling firestops should be caulked with high temperature caulk to seal gaps. Gas line holes and other openings should be caulked with high temp caulk or stuffed with unfaced insulation. If the appliance is being installed on a cement slab, a layer of plywood may be placed underneath to prevent conducting cold up into the room.

C. Clearances

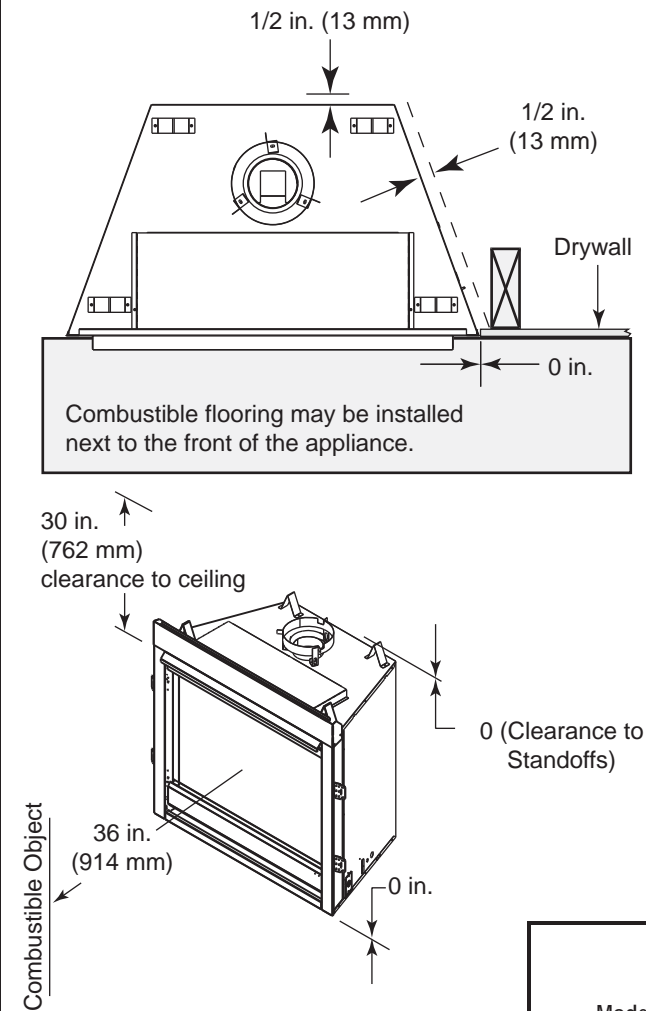
WARNING! Risk of Fire! Maintain specified air space clearances to appliance and vent pipe:

- Insulation and other materials must be secured to prevent accidental contact.
- The chase must be properly blocked to prevent blown insulation or other combustibles from entering and making contact with fireplace or chimney.
- Failure to maintain airspace may cause overheating and a fire.

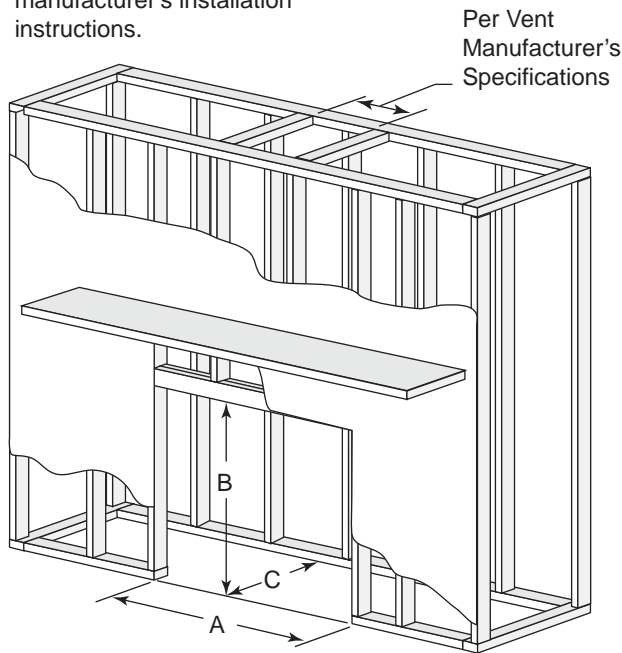
NOTICE: Install appliance on hard metal or wood surfaces extending full width and depth. **DO NOT** install directly on carpeting, vinyl, tile or any combustible material other than wood.

Note: The appliance **must** be raised 1 1/4 in. (32 mm) off floor so the Harbor System can be used. Adjust framing and vent locations accordingly.

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



Note: All pipe clearance specifications are per vent manufacturer's installation instructions.



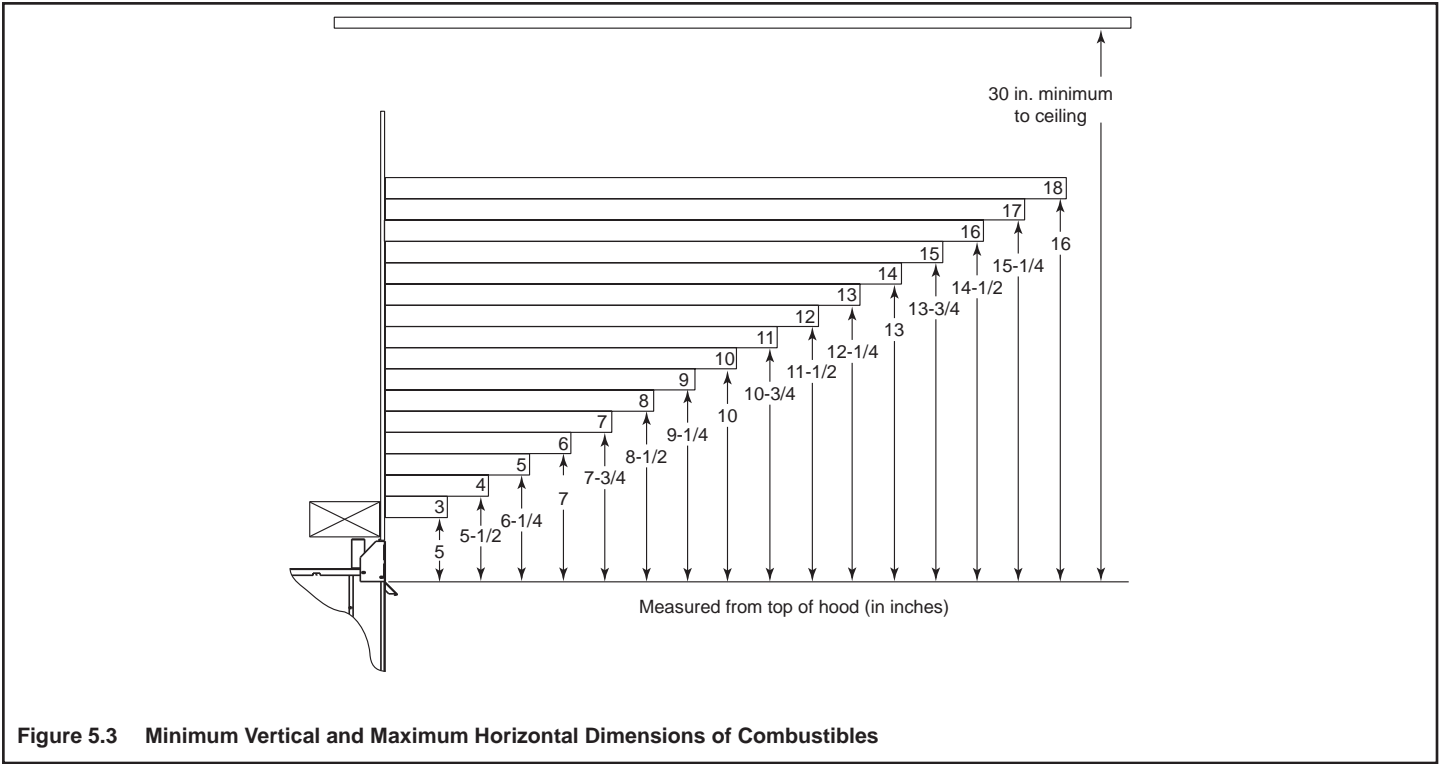
Model		A Rough Opening (Width)	B Rough Opening (Height)	C Rough Opening (Depth)
CB4236MIR	in.	42	38-3/4	23-1/2
	mm	1067	984	597
CB4842MIR	in.	48	38-3/4	23-1/2
	mm	1219	984	597

Figure 5.2 Clearances to Combustibles

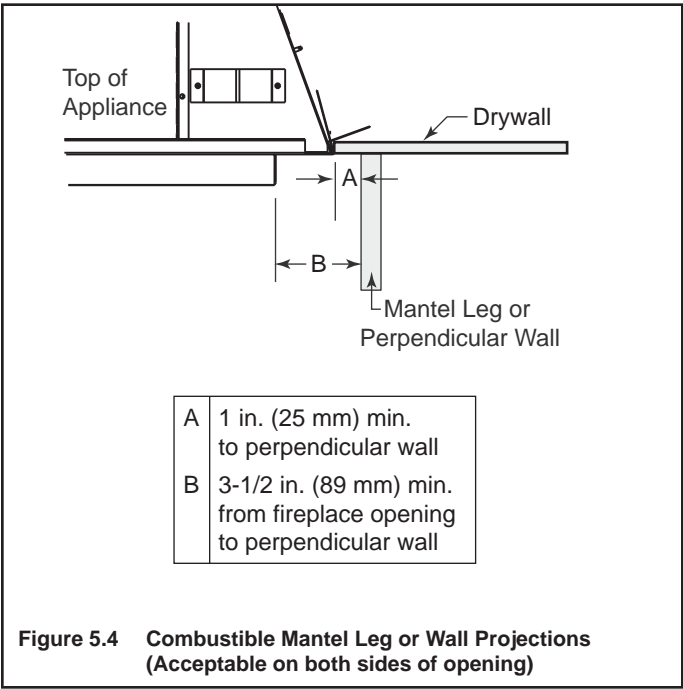
D. Mantel and Wall Projections

WARNING! Risk of Fire! Comply with all minimum clearances as specified. Framing or finishing material closer than the minimums listed must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc).

Mantels



Mantel Legs or Wall Projections



6 Termination Locations

A. Vent Termination Minimum Clearances

⚠ WARNING

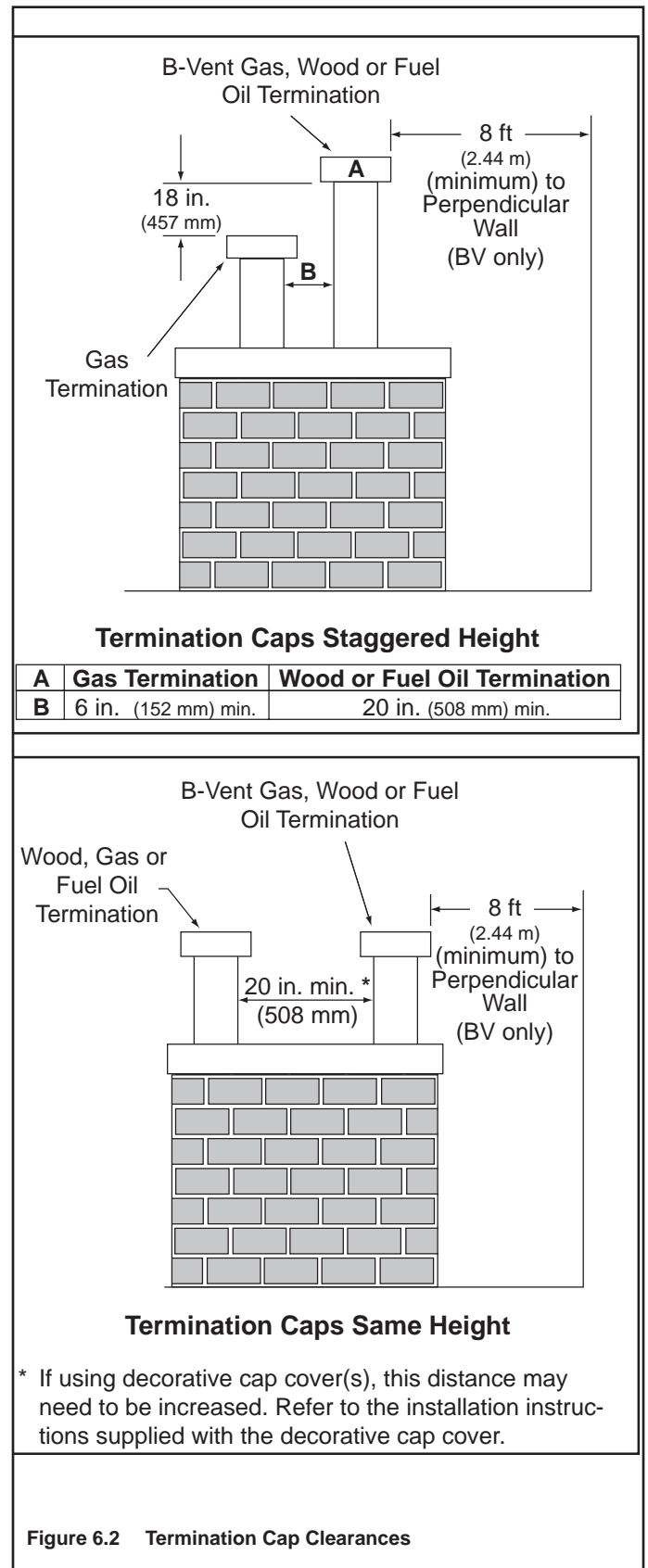
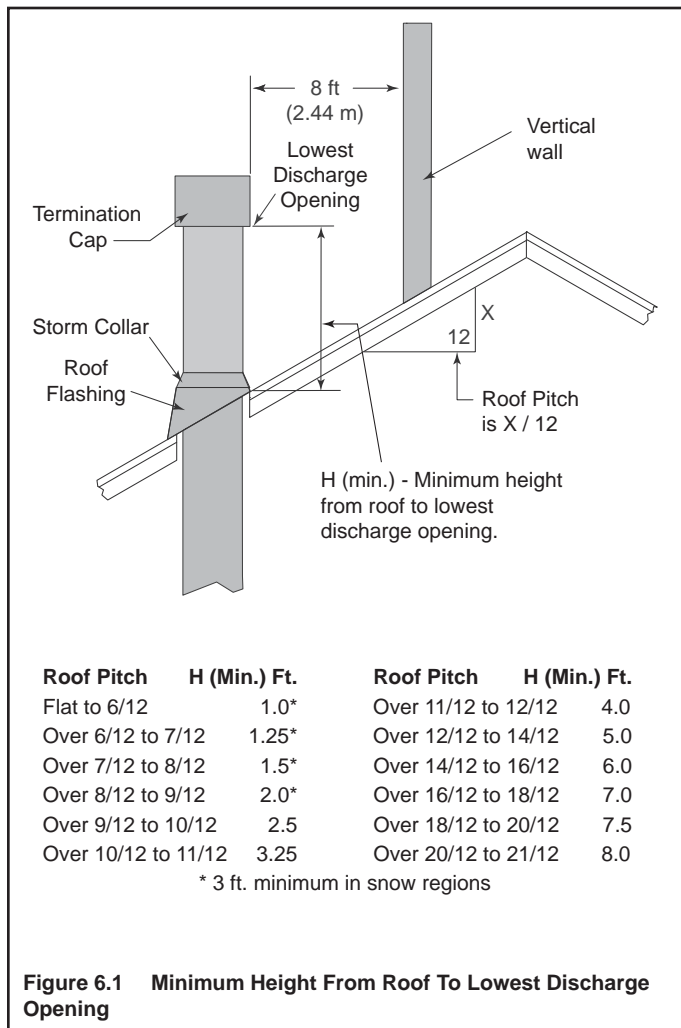


Fire Risk.

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 overheating and fire.



7 Vent Information and Diagrams

A. Vent Guidelines

WARNING! Fire Risk/Asphyxiation! This appliance requires the specified pipe for operation. Incorrect pipe may cause spillage, condensation and overheating.

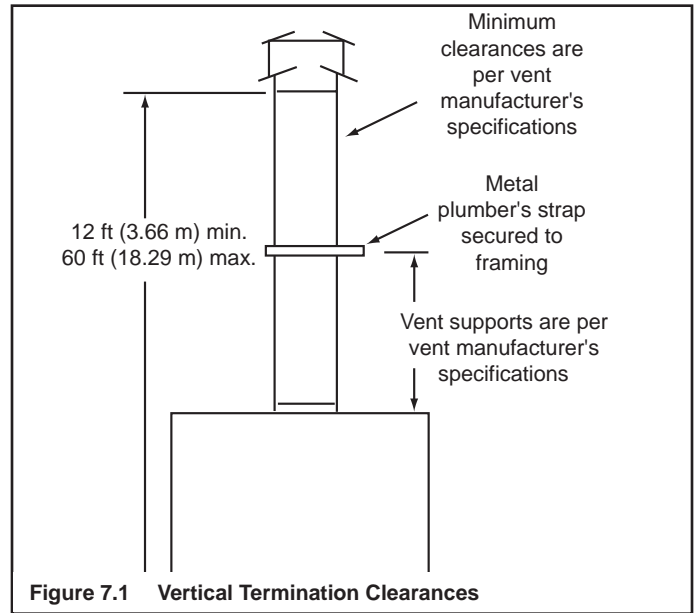
These models require the 5 in. (127 mm) B-vent double wall vent pipe.

- This system **MUST** terminate vertically.
- Follow pipe manufacturer's installation guidelines when installing the appliance.

WARNING! Fire Risk/Explosion/Asphyxiation! 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.



B. Vent System Configuration

CAUTION! Risk of Fire! ALL vent configuration specifications **MUST** be followed. This product is tested and listed to these specifications. Appliance performance will suffer if specifications are not followed.

Rise to Run Ratio = 2:1

Maximum Total Horizontal Run = 30 Feet

Minimum Total Vertical Rise = 12 Feet

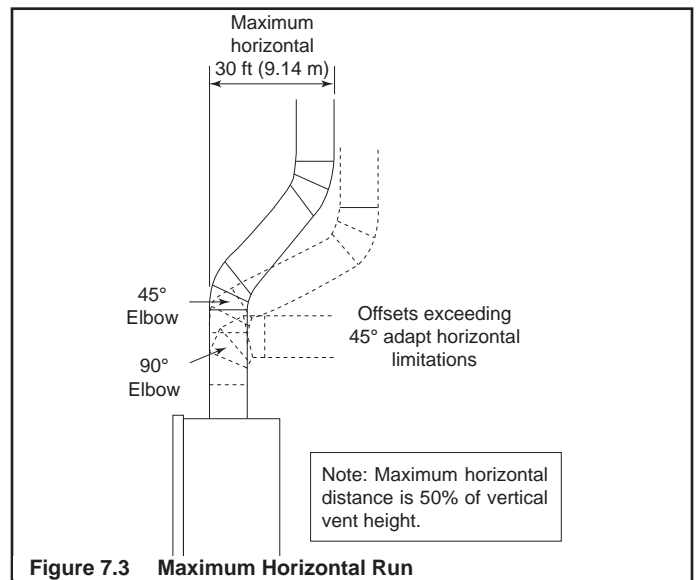
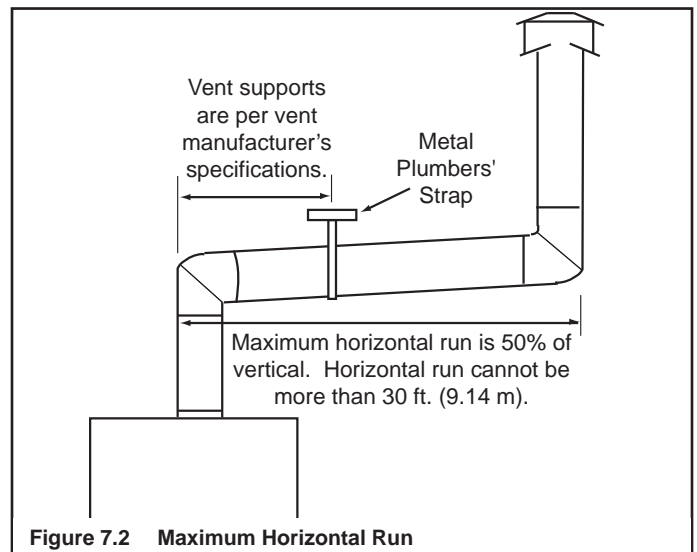
Maximum Total Vertical Rise = 60 Feet

Maximum Number of Elbows: Four 90° or Eight 45°

WARNING! Risk of Fire or Explosion! Insulation and other combustibles must not infringe on clearances.

- **ALWAYS** maintain specified clearances around venting and firestop systems.
- Install firestops as specified.

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



8 Vent Clearances and Framing

A. Pipe Clearances to Combustibles

Vent clearances are per vent manufacturer's specifications. The vent **MUST** be Listed B-Vent pipe.

WARNING! Risk of Fire! MAINTAIN AIR space clearance to vent. **DO NOT** pack insulation or other combustibles:

- Between ceiling firestops
- Between wall shield firestops
- Around vent system

Failure to keep insulation or other material away from vent pipe may cause over heating and fire.

B. Wall and Ceiling Penetration Framing

For a wall or ceiling penetration consult B-vent pipe manufacturer's instructions to provide adequate clearances. Use same size framing materials as those used in the wall or ceiling construction. Firestop spacers must be used in wall and ceiling penetrations per the B-Vent pipe manufacturer's specifications and national, regional and local codes.

Note: MUST terminate vertically.

C. Vertical Penetration Framing

WARNING! Fire Risk. DO NOT allow loose materials or insulation to touch vent. *Hearth & Home Technologies Inc. requires the use of an attic shield.*

The National Fuel Gas Code ANSI Z223.1 and NFPA 54 requires an attic shield constructed of 26 gauge minimum metal that extends at least 2 in. (51 mm) above insulation.

Attic shields must meet specified clearance and be secured in place.

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

9 Appliance Preparation

A. Install Outside Air Kit Damper Assembly

CAUTION! Risk of Cuts/Abrasions/Flying Debris.

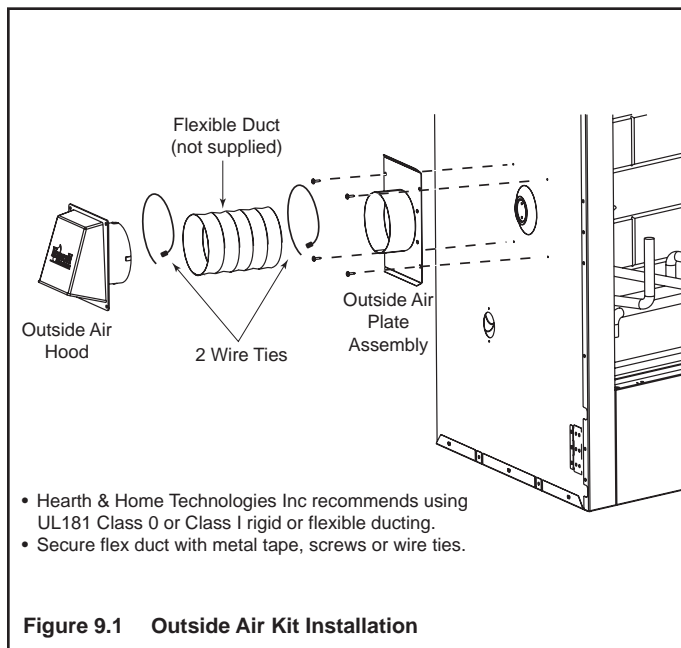
Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.

WARNING! Risk of Fire/Asphyxiation. 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 the installation instructions provided with the kit.



B. Gas and Electrical Connections

If applicable, ensure that gas and electrical connections are installed at this time. Refer to Sections 11 (Gas Information) and 12 (Electrical Information).

C. Secure and Level the Appliance

WARNING! Risk of Fire! Prevent contact with:

- Sagging or loose insulation
- Insulation backing or plastic
- Framing and other combustible materials

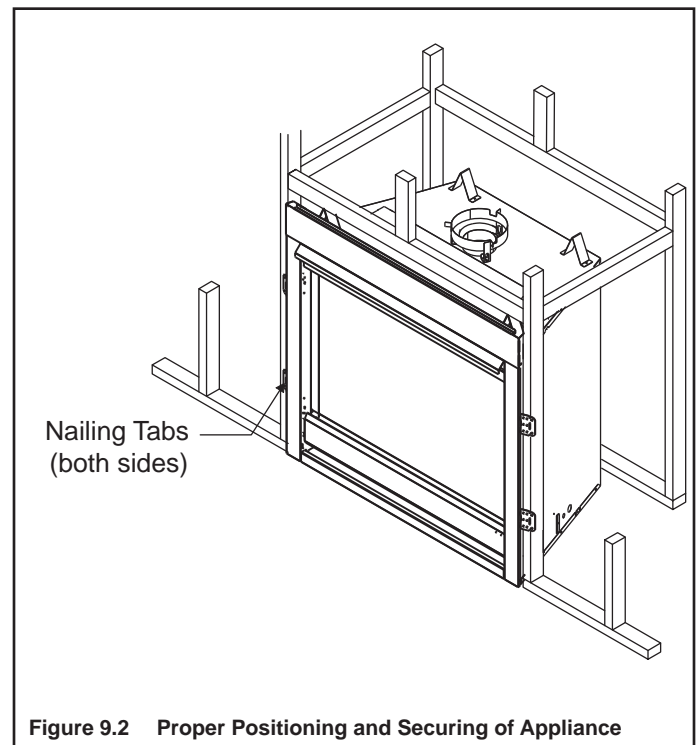
Block openings into the chase to prevent entry of blown-in insulation. Make sure insulation and other materials are secured.

DO NOT notch the framing around the appliance standoffs.

Failure to maintain air space clearance may cause overheating and fire.

The diagram shows how to properly position, level, and secure the appliance (see Figure 9.2). Nailing tabs are provided to secure the appliance to the framing members.

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



10 Installing Vent Pipe

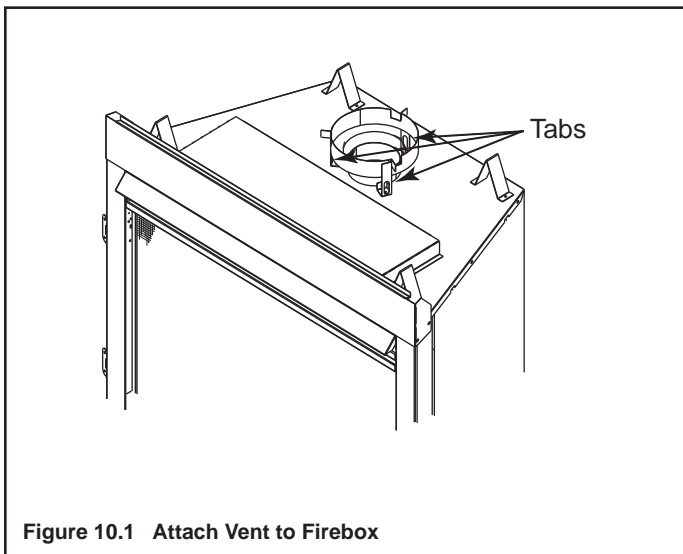
A. Assembly of Vent Sections

This B-Vent appliance requires 5 in. B-vent double-wall pipe. Follow the pipe manufacturer's installation guidelines when installing the unit. This will ensure proper operation and prevent safety hazards.

WARNING! Risk of Fire/Exhaust Fumes! Assemble pipe sections per B-vent manufacturer's instructions. Use support tabs for screws. Pipe may separate if not properly joined.

B. Attach Vent to Firebox

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 10.1.



C. Secure Vent Sections

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

WARNING! Risk of Fire or Explosion! Use vent run supports per vent manufacturer's installation instructions.

- Connect vent sections per vent manufacturer's installation instructions.
- Maintain all clearances to combustibles. Maintain specified slope (if required).
- Improper support may allow vent to sag or separate.

D. Install Attic Insulation Shield

WARNING! Fire Risk. DO NOT allow loose materials or insulation to touch vent. Hearth & Home Technologies Inc. requires the use of an attic shield.

The National Fuel Gas Code ANSI Z223.1 and NFPA 54 requires an attic shield constructed of 26 gauge minimum metal that extends at least 2 in. (51 mm) above insulation.

Attic shields must meet vent manufacturer's specified clearance and be secured in place per vent manufacturer's instructions.

11 Gas Information

A. Fuel Conversion

- Make sure the appliance is compatible with available gas types.
- Conversions must be made by a qualified service technician using Hearth & Home Technologies specified and approved parts.


B. Gas Pressure

- Optimum appliance performance requires proper input pressures.
- Gas line sizing requirements will be determined in ANSI Z221.3 National Fuel Gas Code in the USA and CAN/CGA B149 in Canada.
- Pressure requirements are:

Gas 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.

WARNING! Risk of Fire or Explosion! High pressure will damage valve. Low pressure may cause explosion.

- Verify inlet pressures. Verify minimum pressures when other household gas appliances are operating.
- Install regulator upstream of valve if line pressure is greater than 1/2 psig.



⚠ WARNING

Fire Risk.
Explosion Hazard.
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.

Note: Have the gas supply line installed in accordance with local codes, if any. If not, follow ANSI Z223.1. 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.**

C. Gas Connection

- Refer to Reference Section 16.A. for location of gas line access in appliance.
- Gas line may be run through knockout(s) provided on either side or the bottom of the appliance.
- 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 the appliance. Follow local codes.
- Pipe incoming gas line into valve compartment.
- Connect incoming gas line to the 1/2 in. (13 mm) connection on manual shutoff valve.

WARNING! Risk of Fire or Explosion! Support control when attaching pipe to prevent bending gas line.

- A small amount of air will be in the gas supply lines.

WARNING! Risk of Fire or Explosion! Gas build-up during line purge could ignite.

- Purge should be performed by qualified service technician.
- Ensure adequate ventilation.
- Ensure there are no ignition sources such as sparks or open flames.

Light the appliance. It will take a short time for air to purge from lines. When purging is complete the appliance will light and operate normally.

WARNING! Risk of Fire, Explosion or Asphyxiation! Check all fittings and connections with a non-corrosive commercially available leak-check solution. **DO NOT** use open flame. Fittings and connections could have loosened during shipping and handling.

WARNING! Risk of Fire! DO NOT change valve settings. This valve has been preset at the factory.

D. High Altitude Installations

NOTICE: If the heating value of the gas has been reduced, these rules do not apply. Check with your local gas utility or authorities having jurisdiction.

When installing above 2000 feet elevation:

- In the USA: Reduce burner orifice 4% for each 1000 feet above 2000 feet.
- In CANADA: Reduce burner orifice 10% for elevations between 2000 feet and 4500 feet. Above 4500 feet, consult local gas utility.

12 Electrical Information

A. Wiring Requirements

NOTICE: 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 C22.1**.

- Wire the appliance junction box to 110-120 VAC. This is required for use of optional accessories (standing pilot ignition) or proper operation of the appliance (Intellifire ignition).
- • A 110-120 VAC circuit for this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks.
- Low voltage and 110 VAC voltage cannot be shared within the same wall box.

WARNING! Risk of Shock or Explosion! DO NOT wire 110V to the valve or to the appliance wall switch. Incorrect wiring will damage controls.

B. Intellifire Ignition System Wiring

- Wire the appliance junction box to 110 VAC for proper operation of the appliance.

WARNING! Risk of Shock or Explosion! DO NOT wire IPI controlled appliance junction box to a switched circuit. Incorrect wiring will override IPI safety lockout.

- Refer to Figure 12.1. Intellifire Pilot Ignition (IPI) Wiring Diagram.

- This appliance is equipped with an Intellifire control valve which operates on a 3 volt system.
- Plug the 3-volt AC transformer into the appliance junction box to supply power to the unit OR install two D cell batteries (not included) into the battery pack before use.

NOTICE: Batteries should not be placed in the battery pack while using the transformer. Remove batteries before using the transformer, and unplug the transformer before installing the batteries. Battery polarity must be correct or module damage will occur.

C. Optional Accessories Requirements

- This appliance may be used with a wall switch, wall mounted thermostat and/or a remote control.
- Wiring for optional Hearth & Home Technologies approved accessories should be done now to avoid reconstruction. Follow instructions that come with those accessories.

D. Electrical Service and Repair

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

WARNING! Risk of Shock! Replace damaged wire with type 105° C rated wire. Wire must have high temperature insulation.

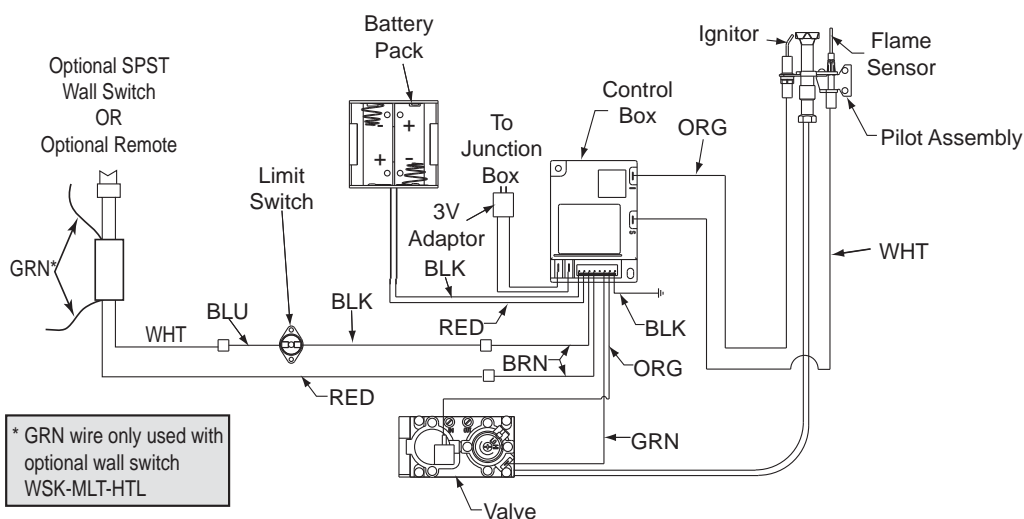


Figure 12.1 Intellifire Pilot Ignition (IPI) Wiring Diagram

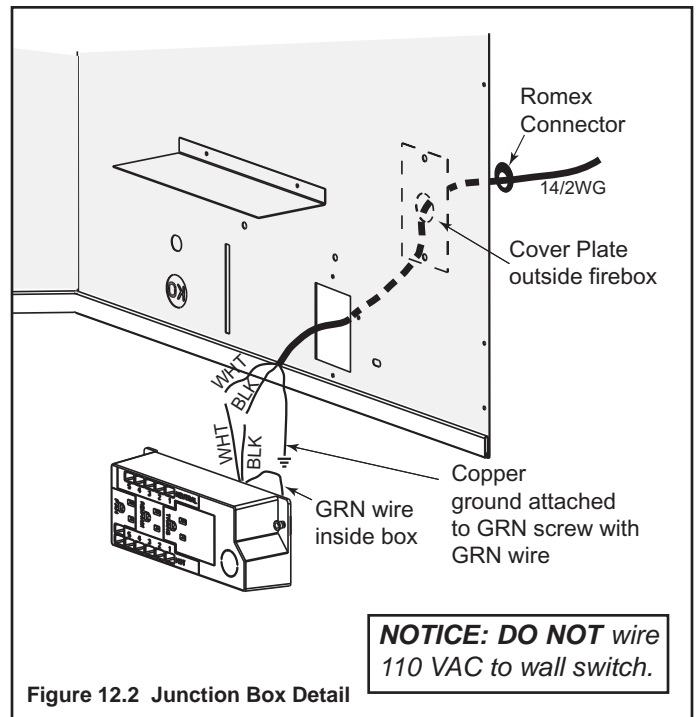
E. Junction Box Installation

If the box is being wired from the **OUTSIDE** of the appliance:

- Remove the cover plate located on the outer shell - right side (see Figure 12.2).
- Install the supplied Romex™ connector in the cover plate.
- Make all necessary wire connections and reattach the cover plate to the outer shell.

If the box is being wired from the **INSIDE** of the appliance:

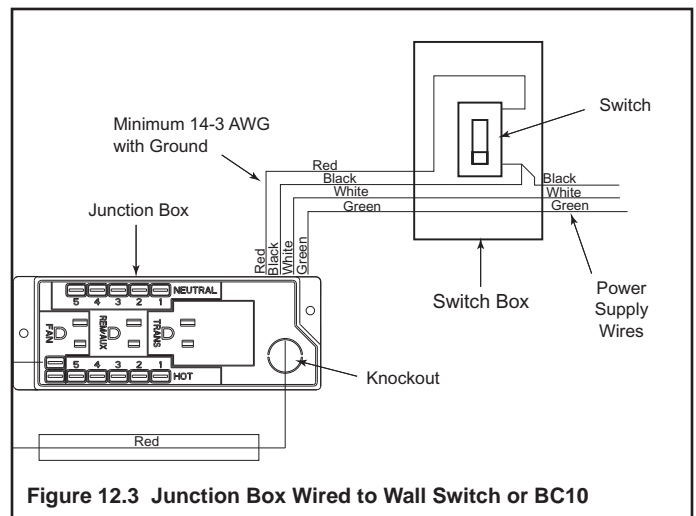
- Remove the screw attaching the junction box/receptacle to the outer shell, rotate the junction box inward to disengage it from the outer shell.
- Pull the electrical wires from outside the appliance through this opening into the valve compartment.
- Make all necessary wire connections to the junction box/receptacle and reassemble the junction box/receptacle to the outer shell.



F. Wall Switch Installation for Fan (Optional)

If the box is being wired to a wall mounted switch for use with a fan, see Figure 12.3:

- The power supply for the appliance must be brought into a switch box.
- The power can then be supplied from the switch box to the appliance using a minimum of 14-3 with ground wire.
- At the switch box connect the black (hot) wire and red (switch leg) wire to the wall switch as shown.
- At the appliance connect the black (hot), white (neutral) and green (ground) wires to the junction box as shown.
- Add a 1/4 in. insulated female connector to the red (switch leg) wire, route it through the knockout in the face of the junction box, and connect to the top fan switch connector (1/4 in. male) as shown.

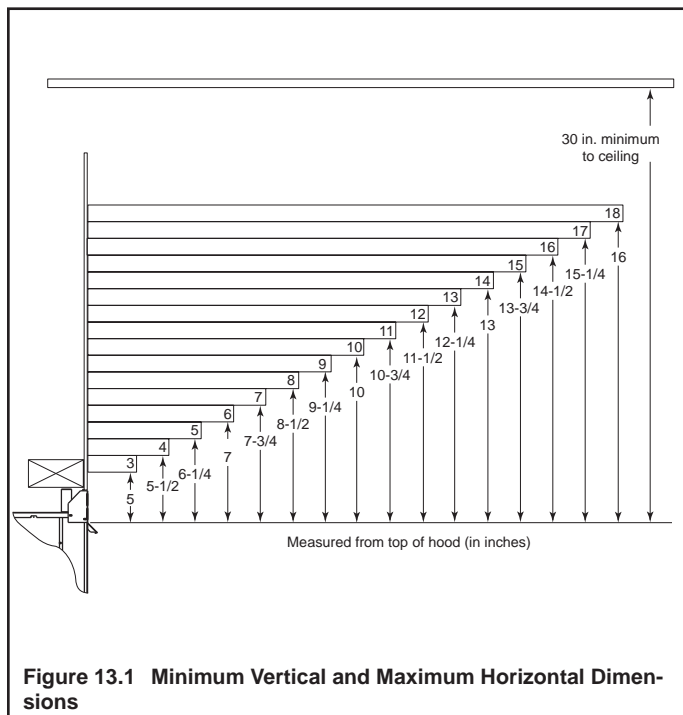


13 Finishing

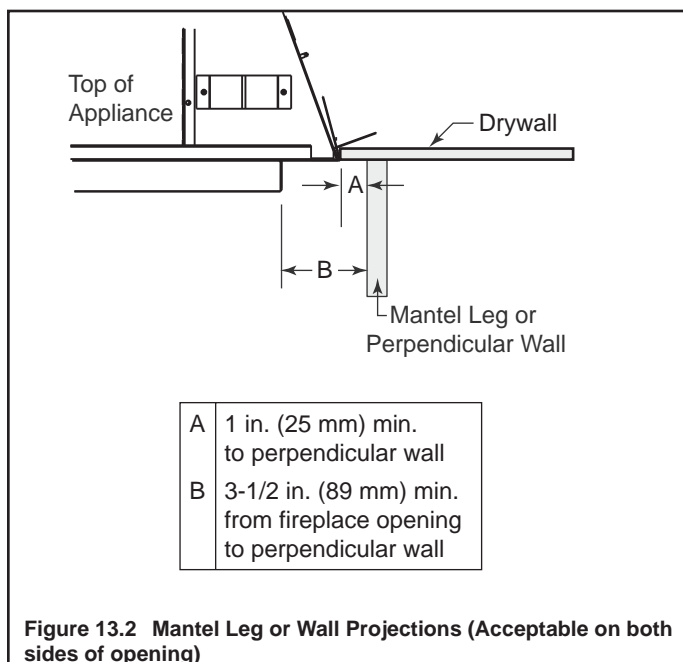
A. Mantel and Wall Projections

WARNING! Risk of Fire! Comply with all minimum clearances as specified. Framing closer than the minimums listed must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc.) Failure to comply could cause fire.

Mantels



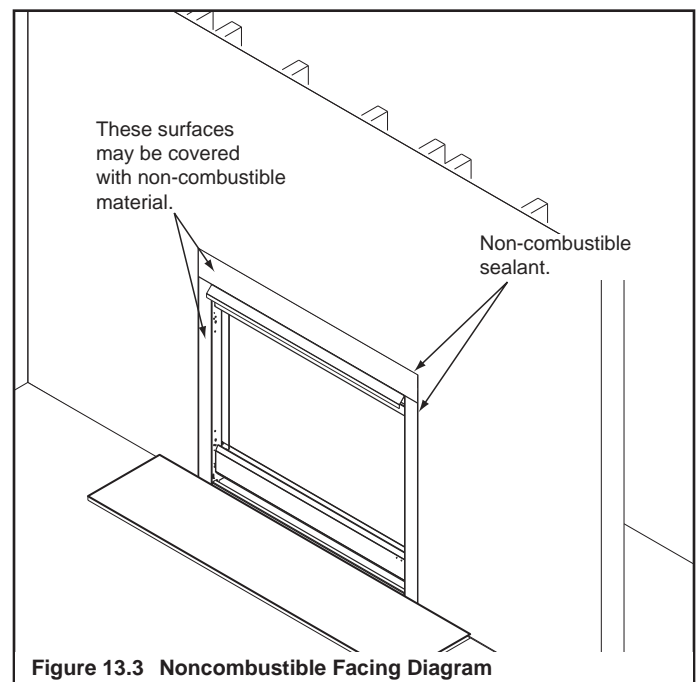
Mantel Legs or Wall Projections



B. Facing Material

- Metal front faces may be covered with non-combustible materials only.
- Facing and/or finishing materials must not interfere with air flow through louvers, operation of louvers or doors, or access for service.
- Facing and/or finishing materials must never overhang into the glass opening.
- Observe all clearances when applying combustible materials.
- Seal joints between the finished wall and appliance top and sides using a 300 °F minimum sealant. Refer to Figure 13.3.

WARNING! Risk of Fire! DO NOT apply combustible materials beyond the minimum clearances. Comply with all minimum clearances to combustibles as specified in this manual. Overlapping materials could ignite and will interfere with proper operation of doors and louvers.



14 Appliance Setup

A. Remove Glass Assembly

See Section J.

B. Remove the Shipping Materials

Remove shipping materials from inside or underneath the firebox.

C. Clean the Appliance

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

D. Accessories

Install approved accessories per instructions included with accessories. Contact your dealer for a list of approved accessories.

WARNING! Risk of Fire and Electric Shock! Use ONLY Hearth & Home Technologies-approved optional accessories with this appliance. Using non-listed accessories could result in a safety hazard and will void the warranty.

E. Install the Refractory

An optional weathered brick refractory is available for this appliance. Follow the installation instructions supplied with the refractory.

F. Place the Lava Rock & Vermiculite

- See Figures 14.1, 14.2, and 14.4.
- It is not necessary to use the entire bag of either product. Save the remaining amount for future use.

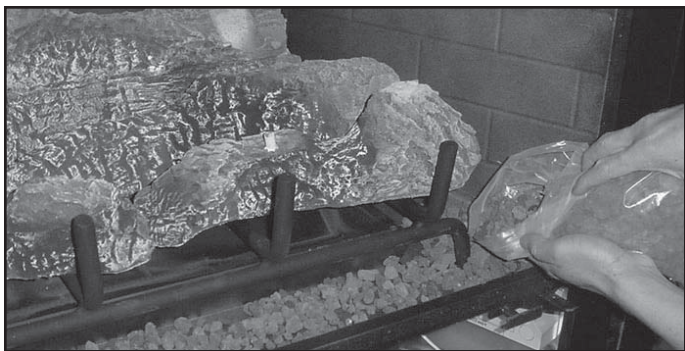


Figure 14.1 Placement of Lava Rock



Figure 14.2 Placement of Vermiculite

G. Place the Rockwool

WARNING! Risk of Explosion! Follow rockwool placement instructions. DO NOT place rockwool directly over burner ports. Replace rockwool material annually. Improperly placed rockwool interferes with proper burner operation.

- Rockwool is shipped with this gas appliance.
- Place a small amount of 1/2 in. diameter pieces (dime-size) of rockwool on the burner pan so that rock wool touches but does not cover the holes in the burner pan.
- It is not necessary to use the entire bag. Save the remaining amount for future use.

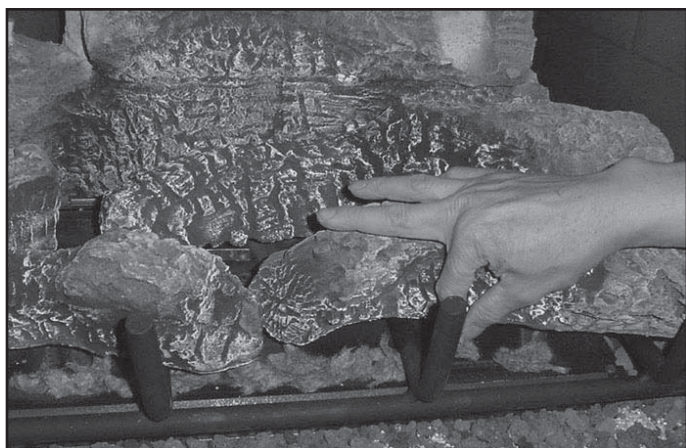


Figure 14.3 Placement of Rock Wool

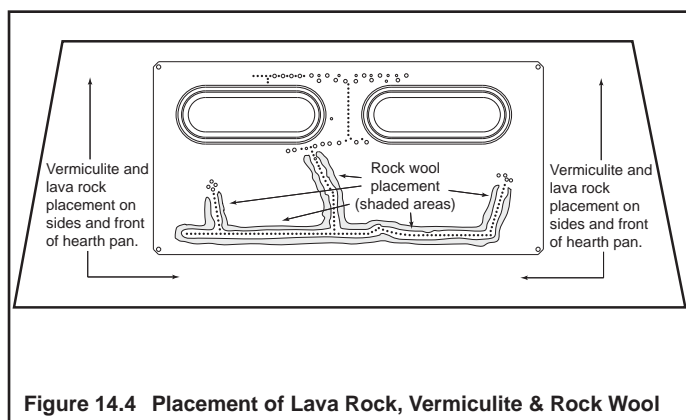


Figure 14.4 Placement of Lava Rock, Vermiculite & Rock Wool

H. Install the Log Assembly

- Base logs have been permanently mounted on the grate assembly and should not be moved. See Figure 14.5.

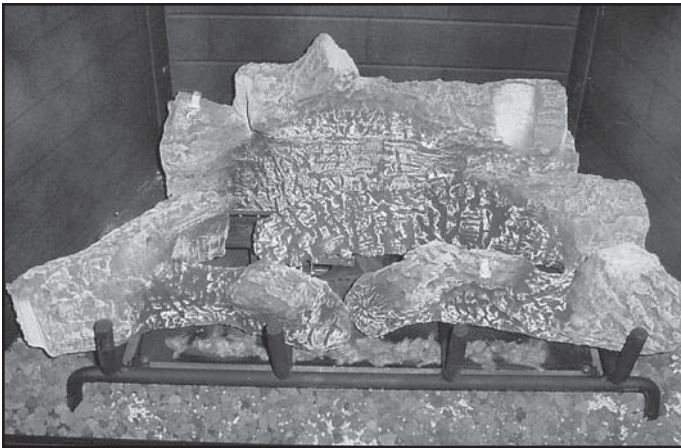


Figure 14.5 Base Logs

- Install “Y” log on left hand side of grate using locating pins to position. See Figure 14.6.



Figure 14.6 Placing Left Top Log

- Install right top log as shown in Figure 14.7 using locating pins to position log properly.



Figure 14.7 Placing Right Top Log

I. Glass Assembly

WARNING! Risk of Asphyxiation! Handle fixed glass assembly with care. Inspect the gasket to ensure it is undamaged and inspect the glass for cracks, chips or scratches.

- DO NOT strike, slam or scratch glass.
- DO NOT operate fireplace with glass removed, cracked, broken or scratched.
- Replace as a complete assembly.

Removing Glass Assembly

- Remove mesh firescreen (refer to Figure 14.15).
- Lift and pull the upper latch cover towards you to expose the two (36 in. model) or three (42 in. model) glass latches.
- Lift and pull lower latch cover to expose the two (36 in. model) or three (42 in. model) glass latches.
- Rotate the bottom of the screen assembly away from the appliance and lower out of the top retainers.
- Release the top and bottom access latches and rotate the top of the glass assembly away from the top of the appliance.
- Place the glass assembly on a surface that will not scratch the surface of the glass assembly.

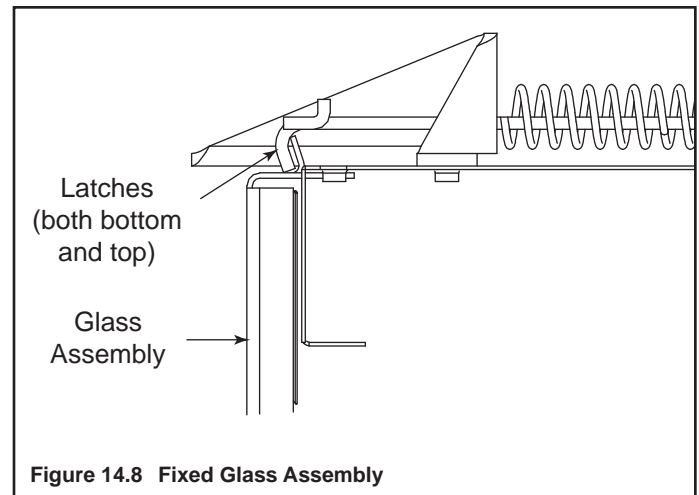


Figure 14.8 Fixed Glass Assembly

Replacing Glass Assembly

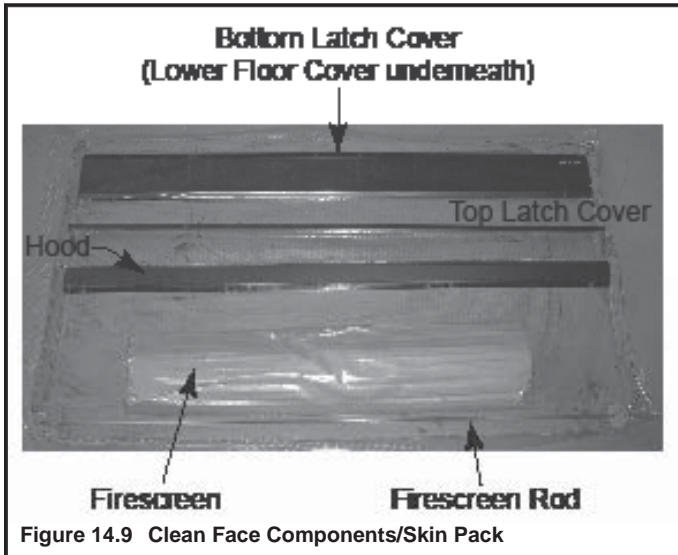
- Replace the glass assembly on the lower access latches.
- Rotate the upper portion of the glass assembly into place.
- Engage the top access latches.
- Engage the lower access latches.
- Reinstall upper latch cover (see Figure 14.12).
- Reinstall lower latch cover (see Figure 14.14).
- Reinstall mesh firescreen (see Figure 14.15).

J. Install Trim

- Install optional trim kits and/or surrounds using the instructions included with the accessory.
- Use non-combustible materials to cover the gap between the sheet rock and the appliance (if desired).
- Do not obstruct or modify the air inlet/outlet grilles.
- Leave space to lower the bottom grille and remove the trim door.

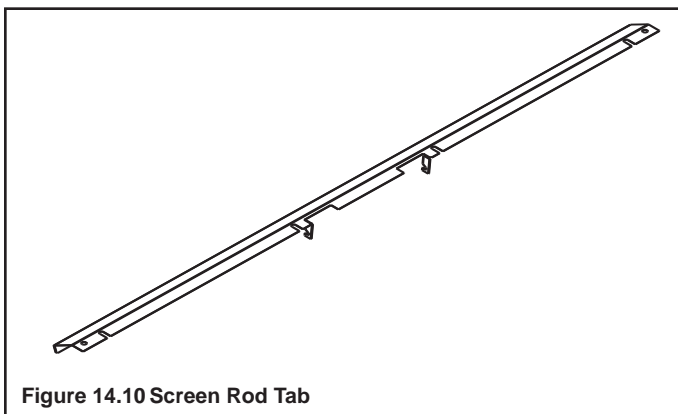
K. Install Clean Face Components

Carefully remove components from skin pack. See Figure 14.9 for identification of components.



Install Hood

- Bend screen rod tabs down at a 90-deg. angle. See Figure 14.10.



- Install above the glass panel.
- Hood must be attached or a fire hazard may result.
- Locate the four screws (for 4236) or five screws (for 4842) just inside the upper section of the appliance.
- Loosen the screws, but do NOT remove.
- Position hood and slide notches over screw heads, ensuring hood also slips into the clips.
- Tighten the screws to hold hood firmly in place.
- See Figure 14.11.

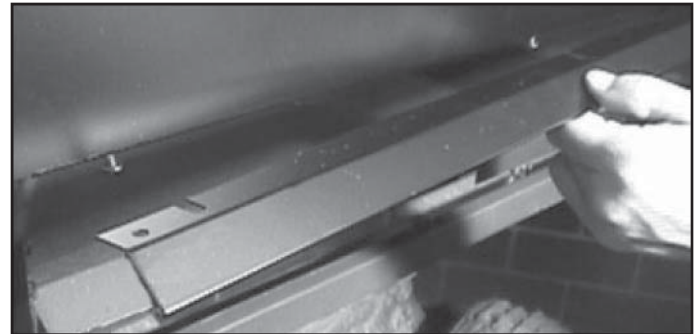
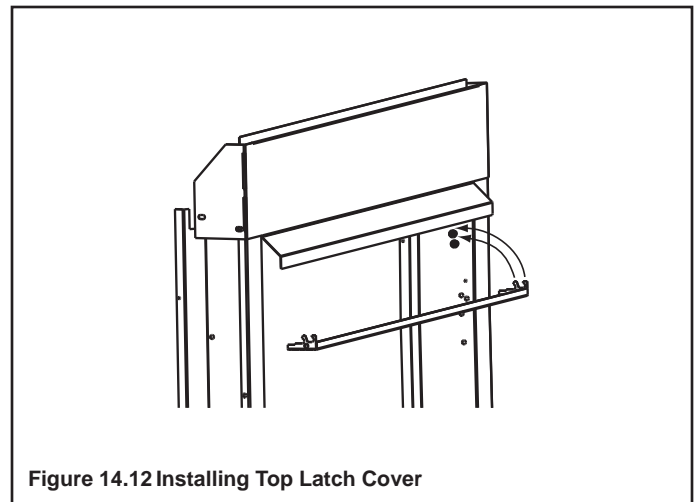


Figure 14.11 Installing the Hood

Install Top Latch Cover

- Insert top latch cover over existing shoulder screws. See Figure 14.12.
- Push down until the tabs lock in place.



Install Floor Cover

- Install floor cover. See Figure 14.13. Floor cover must be installed with brake flange UP and going towards components with notched end to the left of the unit. Do not place cover on top of any components. Move components back if necessary.
- When using the RCTS-MLT-HTL Remote for SIT Valve, the hand tab bend must be bent down for clearance of the solenoid.

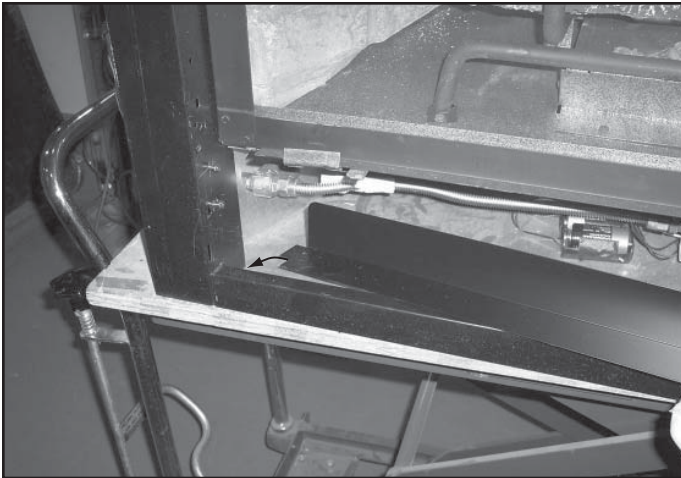


Figure 14.13 Installing Floor Cover

Install Bottom Latch Cover

- Insert bottom latch cover over existing shoulder screws. See Figure 14.14.
- Push down till the tabs lock in place.

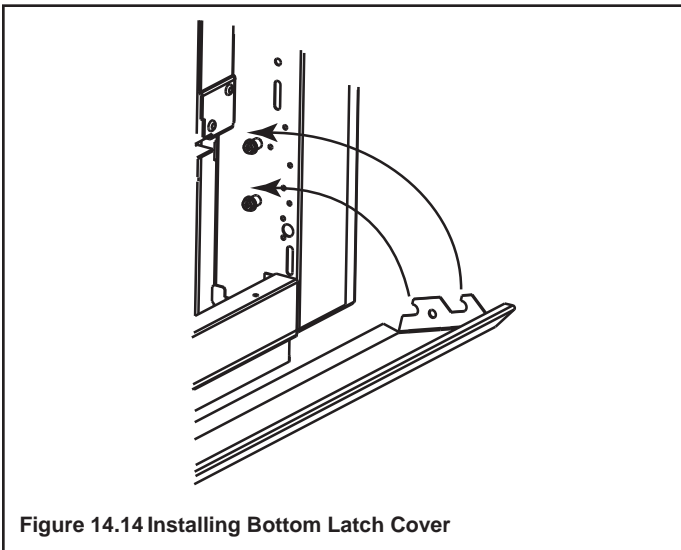


Figure 14.14 Installing Bottom Latch Cover

Install Firescreen Assembly

- Thread screen onto screen rod making sure to thread all screen rings.
- Hold the mesh firescreen in one hand until you get the rod inserted into the side columns to prevent the mesh from falling off the rod.
- Insert one end of screen rod into the hole located in the column as far as it will go. See Figure 14.15



Figure 14.15 Insert Rod Into Side Columns

- Flex the rod and insert it into the hole in the column on the other side.
- Hook the center of the rod into the screen rod tabs (shown in Figure 14.10).
- Spread firescreen to the edges of the firebox opening.
- Hairpin clips are shipped in place in a hole in the bottom of each column. After the screen is in place, squeeze clips and remove from holes. Thread clip through screen (one on each side), squeeze slip and re-insert into holes.

Note: The floor cover in the bottom front of the fireplace may be covering the UL labels. It is loose and can be removed/replaced.

L. Air Shutter Setting

Air shutter settings should be adjusted by a qualified installer at the time of installation. The air shutter is set at the factory for minimum vertical vent run. Adjust air shutter for longer vertical runs.

- It takes 16 full turns of the shutter adjustment handle to move the air shutter from fully open to fully closed.
- When the air shutter adjustment handle is all the way down, the air shutter is in the closed position.

NOTICE: If sooting occurs, provide more air by opening the air shutter.

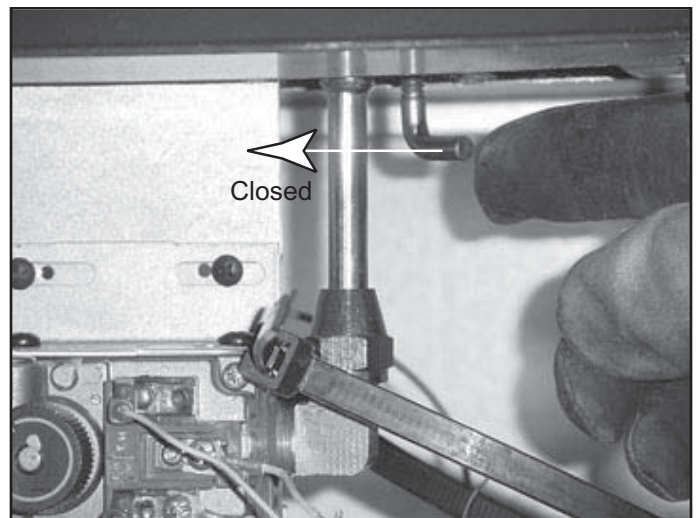


Figure 14.16 Air Shutter

15 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 technician 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. Contact your dealer to arrange a service call by a qualified service technician.

A. Intellifire Ignition System

Symptom	Possible Cause	Corrective Action
1. Pilot won't light. 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 correct terminals on module and pilot assembly.
	B. Loose connections or electrical shorts in the wiring.	Verify no loose connections or electrical shorts in wiring from module to pilot assembly. Verify connections underneath pilot assembly are tight; also verify connections are not grounding out to 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 right side of pilot hood. The gap should be approximately .17 inch or 1/8 in. (3 mm).
	D. Module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place a grounded wire about 3/16 in. (5 mm) away from "I" terminal on module. Place ON/OFF rocker switch or wall switch in ON position. 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. Replace pilot if necessary.
2. Pilot won't light, there is no noise or spark.	A. No power or transformer installed incorrectly.	Verify that transformer is installed and plugged into module. Check voltage of transformer under load at spade 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. Replace any damaged components.
	C. Improper wall switch wiring.	Verify that 110/VAC power is "ON" to junction box.
	D. Module not grounded.	Verify black ground wire from module wire harness is grounded to metal chassis of appliance.
	E. 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. 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 sparks, but Pilot will not light.	A. 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 incorrect.	Verify that spark gap from ignitor to pilot hood is .17 in. or 1/8 in (3 mm).
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance.
	D. Module voltage output / Valve/ Pilot solenoid ohms readings.	Verify battery voltage is at least 2.7 volts. Replace batteries if voltage is below 2.7.

A. Intellifire Ignition System (*continued*)

4. 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 flame sensing 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 flame sensing rod.	With fixed glass assembly in place, verify that flame is engulfing flame sensing rod on left side of pilot hood. Flame sensing rod should glow shortly after ignition. Verify correct pilot orifice is installed and gas inlet is set to pressure specifications. Clean flame sensing rod with emery cloth to remove any contaminants that may have accumulated on flame sensing rod.
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance. Verify that wire harness is firmly connected to the module.
	D. Damaged pilot assembly or contaminated flame sensing rod.	Verify that ceramic insulator around the flame sensing rod is not cracked, damaged, or loose. Verify connection from flame sensing rod to white sensor wire. Clean flame sensing rod with emery cloth to remove any contaminants that may have accumulated on flame sensing rod. Verify continuity with a multimeter with ohms set at lowest range. Replace pilot if any damage is detected.
	E. 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. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine.
5. The pilot and main burner extinguish while in operation.	A. No LP in tank.	Check the LP (propane) tank. Refill the fuel tank.
	B. Improper gas inlet pressure.	Verify with manometer. NG should read 5-14 inches w.c. LP should read 10-14 inches w.c.
	C. Inner vent pipe leaking exhaust gases back into the system.	Check venting system for damage. Replace/repair improperly assembled pipe sections.
	D. Glass installed improperly.	Check to ensure glass is installed properly. Replace glass panel assembly.
	E. Improper vent cap installation.	Check for proper installation and freedom from debris or blockage.
	F. High limit switch has been automatically activated.	This appliance is equipped with an auto reset high limit switch which will shut down the appliance if it spills under flue blockage or excessive negative pressure conditions. Shut off the appliance and the gas supply. Do not attempt to operate the appliance until it has been examined by a qualified service technician.

16 Reference Materials

A. Appliance Dimension Diagram

Dimensions are actual appliance dimensions. Use for reference only. For framing dimensions and clearances refer to Section 5.

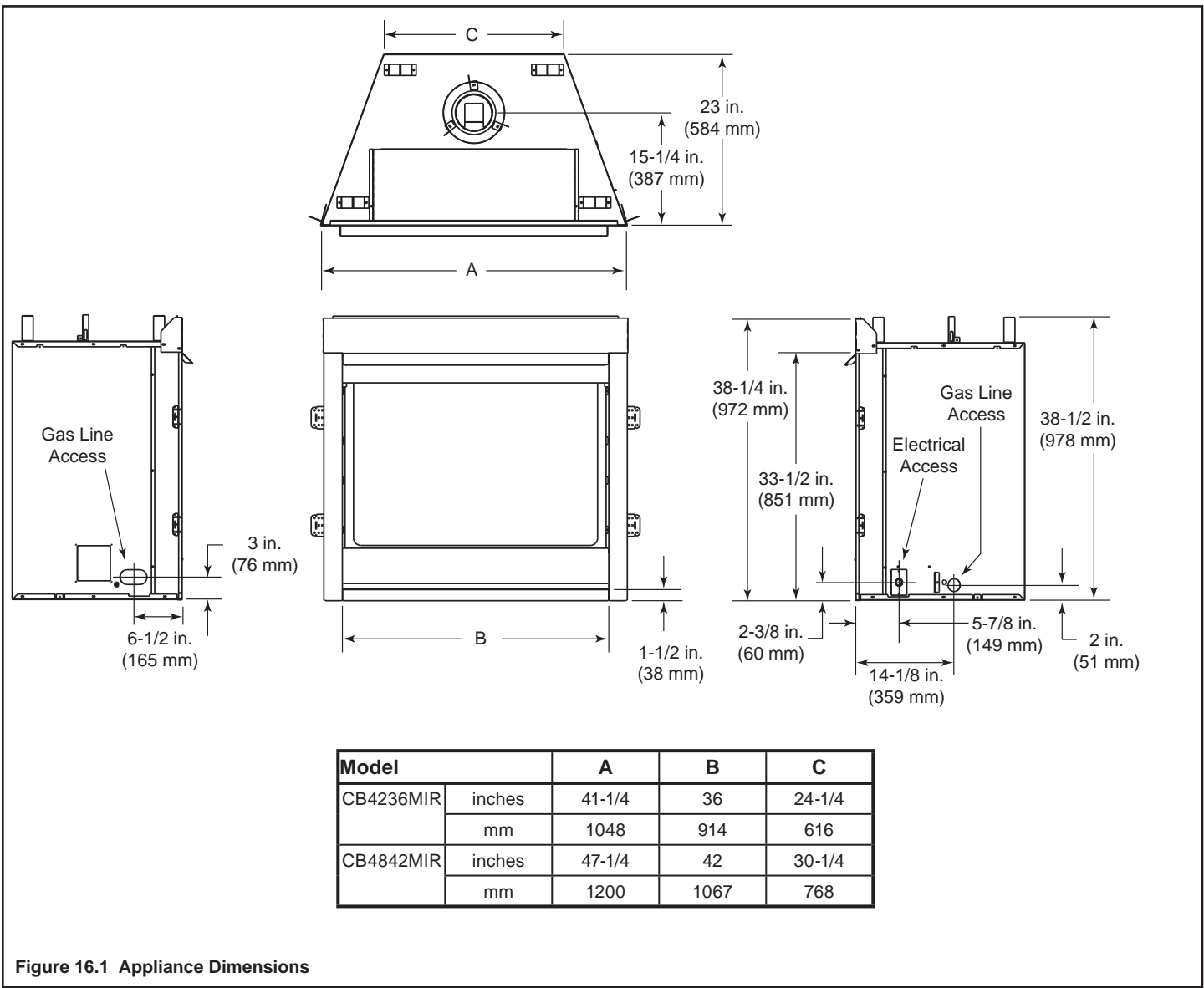
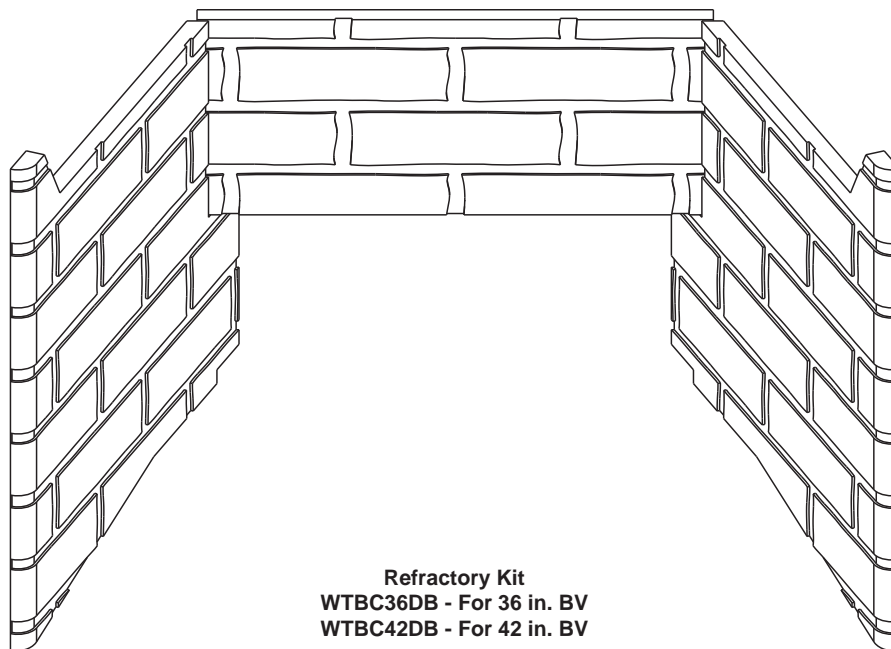
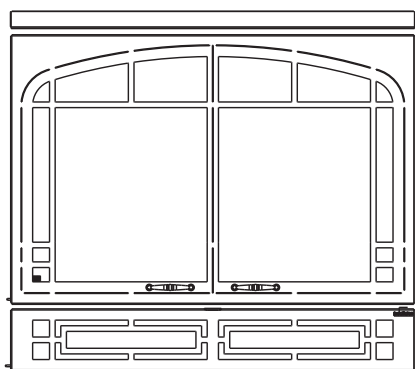


Figure 16.1 Appliance Dimensions

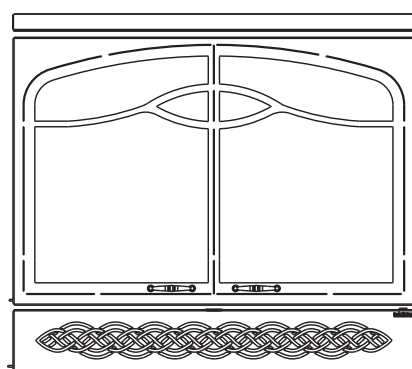
C. Optional Components



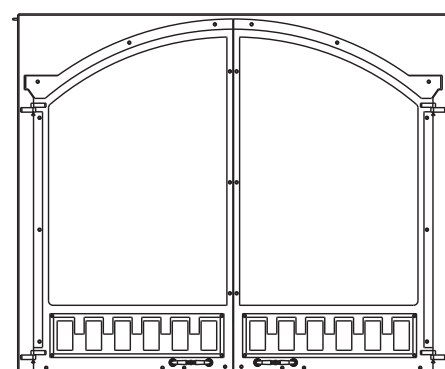
Refractory Kit
WTBC36DB - For 36 in. BV
WTBC42DB - For 42 in. BV



Arts & Crafts Faux Front
FFCAC



Modernist Faux Front
FFCM



Jamestown Faux Front
FFCJ

Contact your dealer for a complete listing of optional components.

C. Optional Components *(continued)*

Model #	Description
FFCM36-B	Modernist-style black decorative faux front
FFCM36PT	Modernist-style pewter decorative faux front
FFCM36BN	Modernist-style brushed nickel decorative faux front
FFCAC36-B	Arts & Crafts-style black decorative faux front
FFCAC36PT	Arts & Crafts-style pewter decorative faux front
FFCAC36BN	Arts & Crafts-style brushed nickel decorative faux front
FFCJ36	Jamestown-style black decorative faux front
FFCJ36PT	Jamestown-style pewter decorative faux front
AK14	Outside air kit
ID4	4 in. I.D. Insulated flex-duct, for use with outside air kits, two 42 in. sections.
UD4	4 in. I.D. Uninsulated flex-duct, for use with outside air kits, two 42 in. sections.
GFK4B	Transaxial fan kit
GFK4MB	Multi-pack of 12 GFK4B transaxial fan kits
GFK160B	160 CFM transaxial fan kit
GFK160MB	Multi-pack of 12 GFK160B 160 CFM transaxial fan kits
WTBC36DB	36 in. weathered refractory
WSK-MLT-HTL	Multi-function wall switch
RCT-MLT-HTL	Multi-functional remote: ON/OFF, high/low flame, room temp, fan speed
SMART-STAT-HTL	Multi-functional remote: ON/OFF, room temp, thermostat temp, timer
SMART-BATT-HTL	Multi-functional remote: ON/OFF, thermostat temp, timer
CKVP	LP gas conversion kit for standing pilot ignition system
CKVN	Natural gas conversion kit for standing pilot ignition system
DCKVP	LP gas conversion kit for Intellifire ignition system
DCKVN	Natural gas conversion kit for Intellifire ignition system
SCKVP-B	LP gas conversion kit
SCKVN-B	NG gas conversion kit

Model #	Description
FFCM42-B	Modernist-style black decorative faux front
FFCM42PT	Modernist-style pewter decorative faux front
FFCM42BN-B	Modernist-style brushed nickel decorative faux front
FFCAC42	Arts & Crafts-style black decorative faux front
FFCAC42PT	Arts & Crafts-style pewter decorative faux front
FFCAC42BN	Arts & Crafts-style brushed nickel decorative faux front
FFCJ42	Jamestown-style black decorative faux front
FFCJ42PT	Jamestown-style pewter decorative faux front
AK14	Outside air kit
ID4	4 in. I.D. Insulated flex-duct, for use with outside air kits, two 42 in. sections.
UD4	4 in. I.D. Uninsulated flex-duct, for use with outside air kits, two 42 in. sections.
GFK4B	Transaxial fan kit
GFK4MB	Multi-pack of 12 GFK4B transaxial fan kits
GFK160B	160 CFM transaxial fan kit
GFK160MB	Multi-pack of 12 GFK160B 160 CFM transaxial fan kits
WTBC42DB	42 in. weathered refractory
WSK-MLT-HTL	Multi-function wall switch
RCT-MLT-HTL	Multi-functional remote: ON/OFF, high/low flame, room temp, fan speed
SMART-STAT-HTL	Multi-functional remote: ON/OFF, room temp, thermostat temp, timer
SMART-BATT-HTL	Multi-functional remote: ON/OFF, thermostat temp, timer
CKVP	LP gas conversion kit for standing pilot ignition system
CKVN	Natural gas conversion kit for standing pilot ignition system
DCKVP	LP gas conversion kit for Intellifire ignition system
DCKVN	Natural gas conversion kit for Intellifire ignition system
SCKVP-B	LP gas conversion kit
SCKVN-B	NG gas conversion kit

This page intentionally left blank.

This page intentionally left blank.

D. Contact Information



Please contact your Heatilator dealer with any questions or concerns.
For the location of your nearest Heatilator dealer,
please visit www.heatilator.com.

- NOTES -

NOTICE



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.



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.

Printed in U.S.A. - Copyright 2008