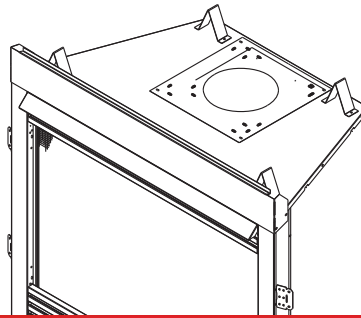


**Model(s):**

CD4236R CD4842R  
CD4236LR CD4842LR  
CD4236IR CD4842IR  
CD4236ILR CD4842ILR  
Direct Vent Gas Appliance



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.

GAS-FIRED



**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 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 appliance.
- Alert children and adults to hazards of high temperatures.

**High temperatures may ignite clothing or other flammable materials.**

- Keep clothing, furniture, draperies and other combustibles 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.

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.*

In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter;  
See Table of Contents for location of additional Commonwealth of Massachusetts requirements.

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.

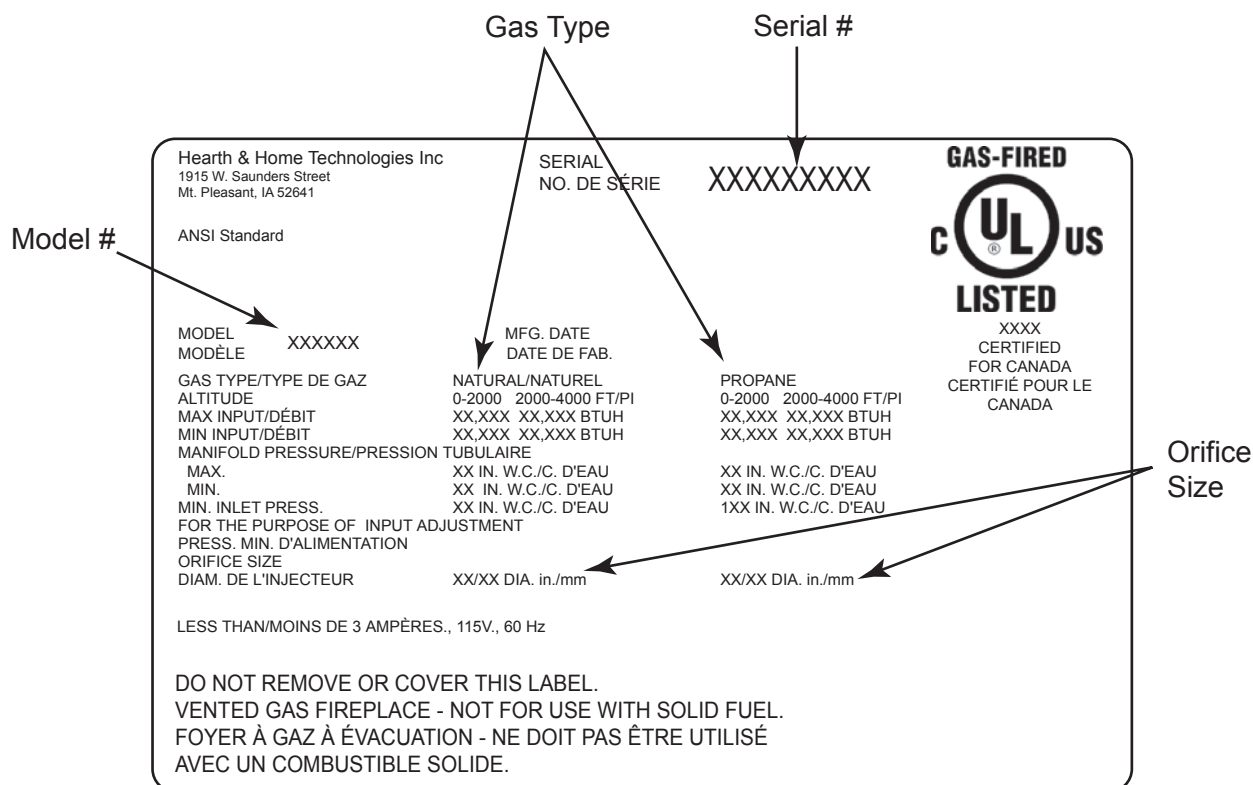
The information contained in this owner's manual, unless noted otherwise, applies to all models and gas control systems.

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

<b>Homeowner Reference Information</b>	<i>We recommend that you record the following pertinent information about your fireplace.</i>
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.

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➔ = Contains updated information.

→ B. Warranty

**Hearth & Home Technologies Inc.  
LIMITED LIFETIME WARRANTY**

Hearth & Home Technologies Inc., on behalf of its hearth brands ("HHT"), extends the following warranty for HHT gas, wood, pellet, coal and electric hearth appliances that are purchased from an HHT authorized dealer.

**WARRANTY COVERAGE:**

HHT warrants to the original owner of the HHT appliance at the site of installation, and to any transferee taking ownership of the appliance at the site of installation within two years following the date of original purchase, that the HHT appliance will be free from defects in materials and workmanship at the time of manufacture. After installation, if covered components manufactured by HHT are found to be defective in materials or workmanship during the applicable warranty period, HHT will, at its option, repair or replace the covered components. HHT, at its own discretion, may fully discharge all of its obligations under such warranties by replacing the product itself or refunding the verified purchase price of the product itself. The maximum amount recoverable under this warranty is limited to the purchase price of the product. This warranty is subject to conditions, exclusions and limitations as described below.

**WARRANTY PERIOD:**

Warranty coverage begins on the date of installation. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the product by an independent, authorized HHT dealer/ distributor, whichever occurs earlier. The warranty shall commence no later than 24 months following the date of product shipment from HHT, regardless of the installation or occupancy date. The warranty period for parts and labor for covered components is produced in the following table.

The term "Limited Lifetime" in the table below is defined as: 20 years from the beginning date of warranty coverage for gas appliances, and 10 years from the beginning date of warranty coverage for wood, pellet, and coal appliances. These time periods reflect the minimum expected useful lives of the designated components under normal operating conditions.

Warranty Period		HHT Manufactured Appliances and Venting							Components Covered
Parts	Labor	Gas	Wood	Pellet	EPA Wood	Coal	Electric	Venting	
1 Year		X	X	X	X	X	X	X	All parts and material except as covered by Conditions, Exclusions, and Limitations listed
2 years				X	X	X			Igniters, electronic components, and glass
		X	X	X	X	X			Factory-installed blowers
			X						Molded refractory panels
3 years				X					Firepots and burnpots
5 years	1 year			X	X				Castings and baffles
7 years	3 years		X	X	X				Manifold tubes, HHT chimney and termination
10 years	1 year	X							Burners, logs and refractory
Limited Lifetime	3 years	X	X	X	X	X			Firebox and heat exchanger
90 Days		X	X	X	X	X	X	X	All replacement parts beyond warranty period

See conditions, exclusions, and limitations on next page.

## **B. Warranty (*continued*)**

### **WARRANTY CONDITIONS:**

- This warranty only covers HHT appliances that are purchased through an HHT authorized dealer or distributor. A list of HHT authorized dealers is available on the HHT branded websites.
- This warranty is only valid while the HHT appliance remains at the site of original installation.
- Contact your installing dealer for warranty service. If the installing dealer is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking warranty service from a dealer other than the dealer from whom you originally purchased the product.
- Check with your dealer in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this warranty.

### **WARRANTY EXCLUSIONS:**

This warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items, or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the warranty period. These parts include: paint, wood, pellet and coal gaskets; firebricks; grates; flame guides; and the discoloration of glass.
- Minor expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the appliance in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the appliance; (2) failure to install the appliance in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs; (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operating instructions; (7) installation or use of components not supplied with the appliance or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the appliance.
- Non-HHT venting components, hearth components or other accessories used in conjunction with the appliance.
- Any part of a pre-existing fireplace system in which an insert or a decorative gas appliance is installed.
- HHT's obligation under this warranty does not extend to the appliance's capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper appliance for the application. Consideration must be given to appliance location and configuration, environmental conditions, insulation and air tightness of the structure.

### **This warranty is void if:**

- The appliance has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The appliance is subjected to prolonged periods of dampness or condensation.
- 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.

### **LIMITATIONS OF LIABILITY:**

- The owner's exclusive remedy and HHT's sole obligation under this warranty, under any other warranty, express or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above. In no event will HHT be liable for any incidental or consequential damages caused by defects in the appliance. Some states do not allow exclusions or limitation of incidental or consequential damages, so these 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 EXPRESSED WARRANTY SPECIFIED ABOVE.**

# 1 Listing and Code Approvals

## A. Appliance Certification

**MODELS:** CD4236R, CD4236LR, CD4236IR, CD4236ILR  
CD4842R, CD4842LR, CD4842IR, CD4842ILR

**LABORATORY:** Underwriters Laboratories, Inc. (UL)

**TYPE:** Vented Gas Fireplace Heater

**STANDARD:** ANSI Z21.88b-2008•CSA 2.33b-2008

**NOTICE:** This installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Code, CSA B149.1.

- A manufactured home (USA only) or mobile home OEM installation must conform with the (U.S.) *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280* or, when such a standard is not applicable, the *Standard for Fire Safety Criteria for Manufactured Home Installation Sites and Communities, ANSI/NFPA 501A*, in the United States, or the *Mobile Homes Standard, CAN/CSA Z240 MH Series* in Canada.
- This appliance complies with the installation requirements for HUD.

### 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 CD Series	CD4236	CD4842
Standing Pilot or IPI		
Max/Min Input Rate (NG)	30,000/20,000	33,000/22,000
Orifice Size (NG)	.104 in./2.64 mm	.109 in./2.77 mm
Max/Min Input Rate (LP)	29,500/20,000	32,500/20,500
Orifice Size (LP)	.065 in./1.65 mm	.067 in./1.70 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.

**Note:** The following requirements reference various Massachusetts and national codes not contained in this document.

## H. Requirements for the Commonwealth of Massachusetts

For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

### Installation of Carbon Monoxide Detectors

At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas fitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors.

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

### Approved Carbon Monoxide Detectors

Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

### Signage

A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) in. in size, **“GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS”**.

## Inspection

The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

## Exemptions

The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

- The equipment listed in Chapter 10 entitled “Equipment Not Required To Be Vented” in the most current edition of NFPA 54 as adopted by the Board; and
- Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

## MANUFACTURER REQUIREMENTS

### Gas Equipment Venting System Provided

When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

- Detailed instructions for the installation of the venting system design or the venting system components; and
- A complete parts list for the venting system design or venting system.

### Gas Equipment Venting System NOT Provided

When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies “special venting systems”, the following requirements shall be satisfied by the manufacturer:

- The referenced “special venting system” instructions shall be included with the appliance or equipment installation instructions; and
- The “special venting systems” shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

**See Gas Connection section for additional Commonwealth of Massachusetts requirements.**



# User Guide

## 2 Operating Instructions

### 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 appliance.

- Alert children and adults to hazards of high temperatures.

#### High temperatures may ignite clothing or other flammable materials.

- Keep clothing, furniture, draperies and other combustibles 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](http://www.hpba.org/staysafe).

To prevent unintended operation when not using your fireplace for an extended period of time (summer months, vacations, 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.***

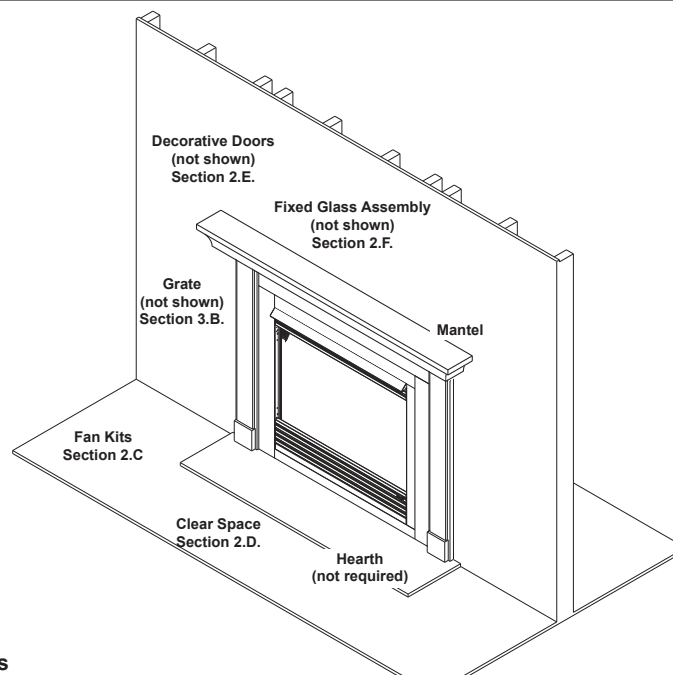


Figure 2.1 General Operating Parts

### C. Fan Kit (optional)

If desired, a fan kit may be added. Contact your dealer to order the correct fan kit.

### 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.

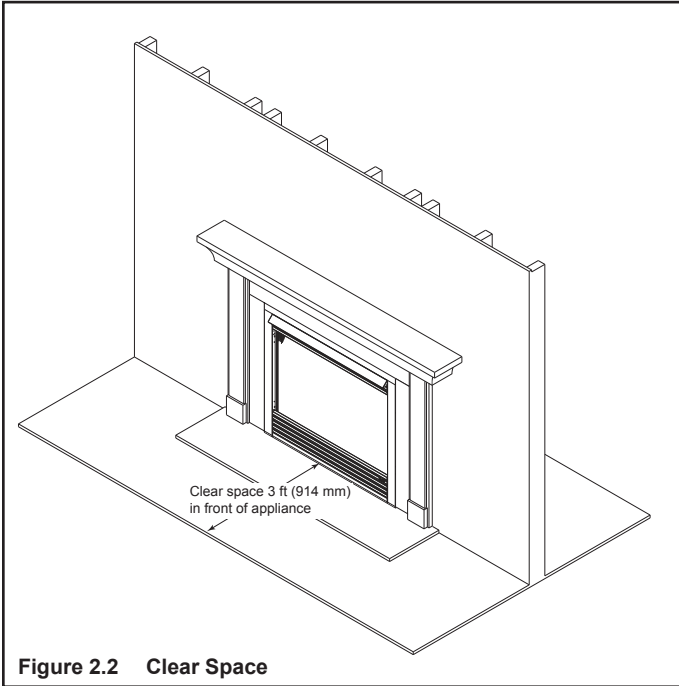


Figure 2.2 Clear Space

### 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 15.J.

### 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. 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, rockwool 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 or Asphyxiation! DO NOT** operate fireplace with fixed glass assembly removed.

Determine if this fireplace has a standing pilot or an Intellifire ignition system. Ask your dealer or open control access panel, look at gas valve assembly.

- A standing pilot ignition will have a red or black ignitor button (refer to Figure 2.3).
- An Intellifire ignition system will not have a button.

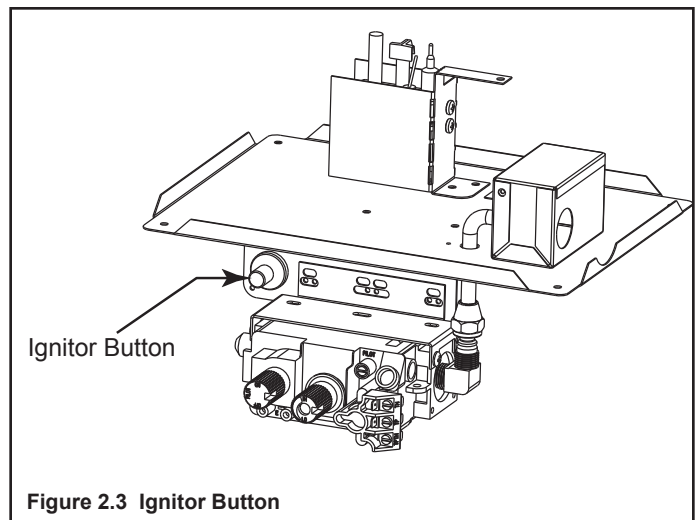


Figure 2.3 Ignitor Button

# I. 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 service or an extended period of time, follow the instructions below.

<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>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>This appliance must be properly connected to a venting system in accordance with the manufacturer's installation instructions.</p>	<p><b>WARNING:</b> 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><b>CAUTION:</b> Hot while in operation. Do not touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.</p>	<p><b>WARNING RISK OF FIRE</b> 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><b>WARNING:</b> 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. 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. * For U.S. only!</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"><b>NATURAL GAS</b></div>	
<h2>○ FOR YOUR SAFETY READ BEFORE LIGHTING</h2>		<p><b>WARNING:</b> 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>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><b>WHAT TO DO IF YOU SMELL GAS</b></p> <ul style="list-style-type: none"> <li>• Do not try to light any appliance.</li> <li>• Do not touch any electric switch; do not use any phone in your building.</li> <li>• Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.</li> </ul>		<p><b>LIGHTING INSTRUCTIONS</b></p> <ol style="list-style-type: none"> <li>1. STOP! Read the safety information above on this label.</li> <li>2. Turn wall switch to the "OFF" position or thermostat to the lowest setting.</li> <li>3. Turn off all electric power to the appliance.</li> <li>4. This appliance is equipped with an ignition device which automatically lights the pilot. Do NOT try to light the pilot by hand.</li> <li>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.</li> <li>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. If the appliance will not operate, follow the instructions "TO TURN OFF GAS TO APPLIANCE" and call your service technician or gas supplier.</li> </ol>		<p><b>TO TURN OFF GAS TO APPLIANCE</b></p> <ol style="list-style-type: none"> <li>1. Turn off wall switch or set thermostat to lowest setting.</li> <li>2. Turn off all electric power to the appliance if service is to be performed.</li> <li>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.</li> <li>4. Replace the control access panel.</li> </ol>		<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 style="text-align: right;">33631D</p>

## J. Lighting Instructions (Standing Pilot)

- For normal use, activate/deactivate your fireplace with the wall switch or remote control.
- If your fireplace must be deactivated for service or an extended period of time, follow the instructions below.

### ○ FOR YOUR SAFETY READ BEFORE LIGHTING

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

- This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- 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.

**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.

**• If you cannot reach your gas supplier, call the fire department.**

- Use only your hand to push in or turn knob. Never use tools. If the manual gas valve will not push in or turn by hand, don't try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- 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.

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

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.

This appliance must be properly connected to a venting system in accordance with the manufacturer's installation instructions.

**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.

**CAUTION:** Hot while in operation. Do not touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

**WARNING RISK OF FIRE**  
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.

**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.

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.

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

NATURAL GAS

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### ○ LIGHTING INSTRUCTIONS

Stop! Read the safety information above on this label.

- Turn wall switch to the "OFF" position or thermostat to the lowest setting.
- Remove control access panel.
- Turn manual gas valve to **CLOSED**. Wait five [5] 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 next step.
- Turn gas line to "OPEN".
- Turn pilot knob clockwise ↻ to "OFF". (Knob may have to be depressed to pass "PILOT" position.)
- Locate pilot assembly inside appliance.
- Locate red ignitor button.
- Turn pilot knob to "PILOT" and push in.
- Continue to hold in pilot knob and push the red ignitor button 12-15 times until small blue pilot flame appears.
- Continue to hold in pilot knob for approximately one minute. Pilot should remain lit. If pilot goes out, wait 5 minutes and repeat Steps 3-9.
- Release and turn knob counterclockwise ↻ to "ON".
- If appliance will not operate, follow the instructions "TO TURN OFF GAS TO APPLIANCE" and call your service technician or gas supplier.

**NOTE:** To light main burner, turn wall switch to "ON". Do not light by hand.

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### ○ TO TURN OFF GAS TO APPLIANCE

- Turn off wall switch or set thermostat to lowest setting.
- Remove control access panel.
- Turn manual gas valve to "CLOSED" position. Do not force.
- Replace control access panel.

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.

29097D

## 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 15.J.
- 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. Flame Adjustment Control

Some appliances come equipped with a high/low flame adjustment control.

- Open control access panel
- Compare your valve to Figures 2.4 & 2.5.
- Adjust the flame by turning knob as indicated in the photo matching your valve.

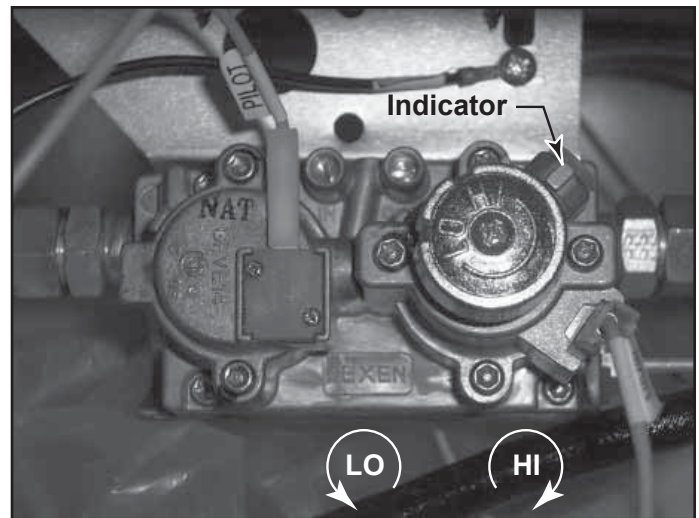


Figure 2.4 DEXEN Valve - IntelliFire Ignition System

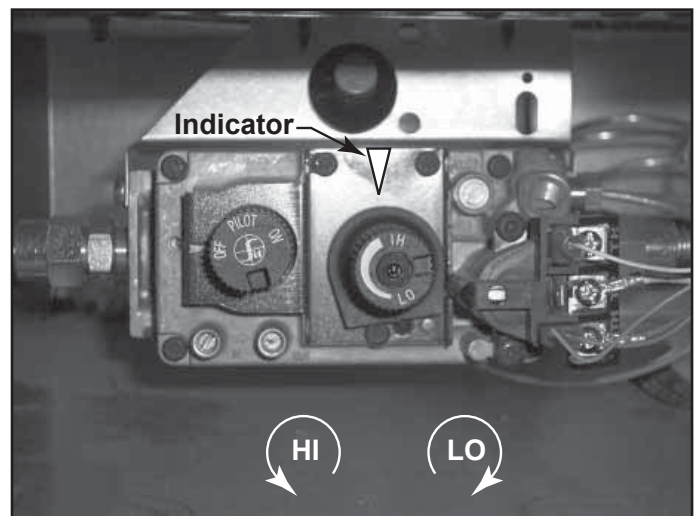


Figure 2.5 SIT Valve - Standing Pilot Ignition System

## M. 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 materials from manufacturing. Odor may also be released from finishing materials and adhesives used near the appliance. 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 appliance.
Is it normal to see the pilot flame burn continually?	In an IntelliFire ignition system (IPI), the pilot flame should turn off when appliance is turned off. Some optional control systems available with IPI models may allow pilot flame to remain lit. In a standing pilot system the pilot will always stay on.

# 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 15.J 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 15 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 rockwool with new dime-size pieces. DO NOT block ports or obstruct lighting paths. Refer to Section 15 for proper rockwool 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 15 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 and 3.2 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 thermocouple/thermopile or IPI millivolt output. Replace as necessary.

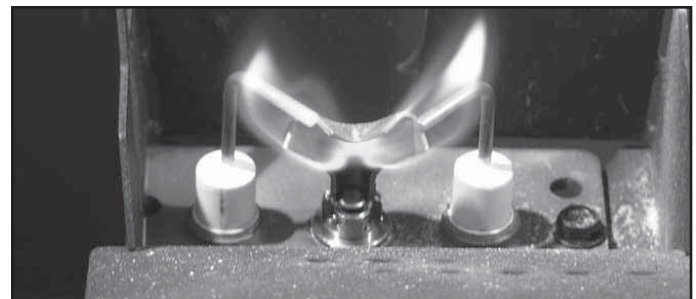


Figure 3.1 IPI Pilot Flame Patterns

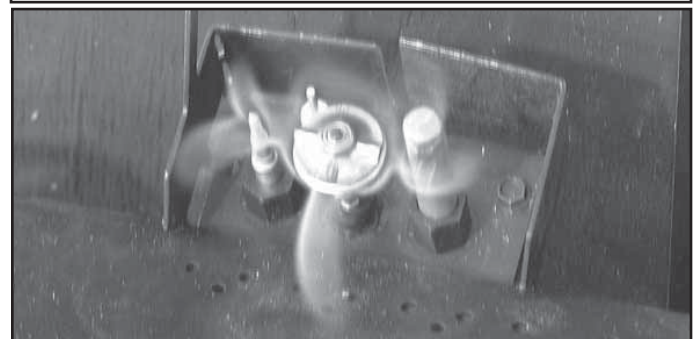


Figure 3.2 Standing Pilot Flame Patterns (SIT controls)

# 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

**Note:** Dual venting configurations **ARE NOT** allowed. Appliance **MUST** be vented **EITHER** vertically **OR** horizontally.

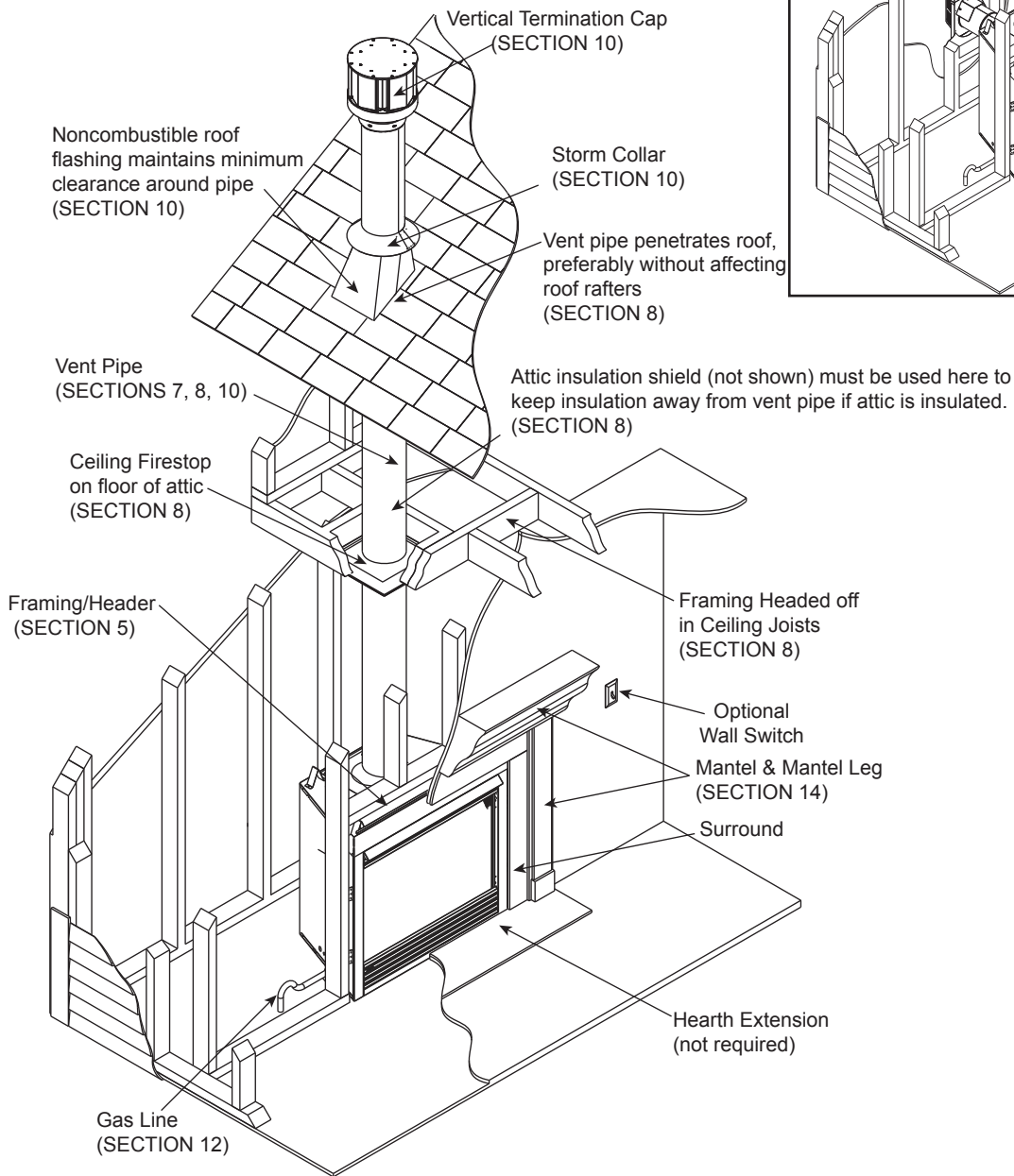


Figure 4.1 Typical System



## B. Design and Installation Considerations

Heatilator direct vent gas appliances are designed to operate with all combustion air siphoned from outside of the building and all exhaust gases expelled to the outside. No additional outside air source is required.

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.

Tape measure	Framing material
Pliers material	High temperature caulking
Hammer	Phillips screwdriver
Gloves	Framing square
Voltmeter	Electric drill and bits (1/4 in.)
Plumb line	Safety glasses
Level	Reciprocating saw
Manometer	Flat blade screwdriver
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 Appliance and Components

- 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.**

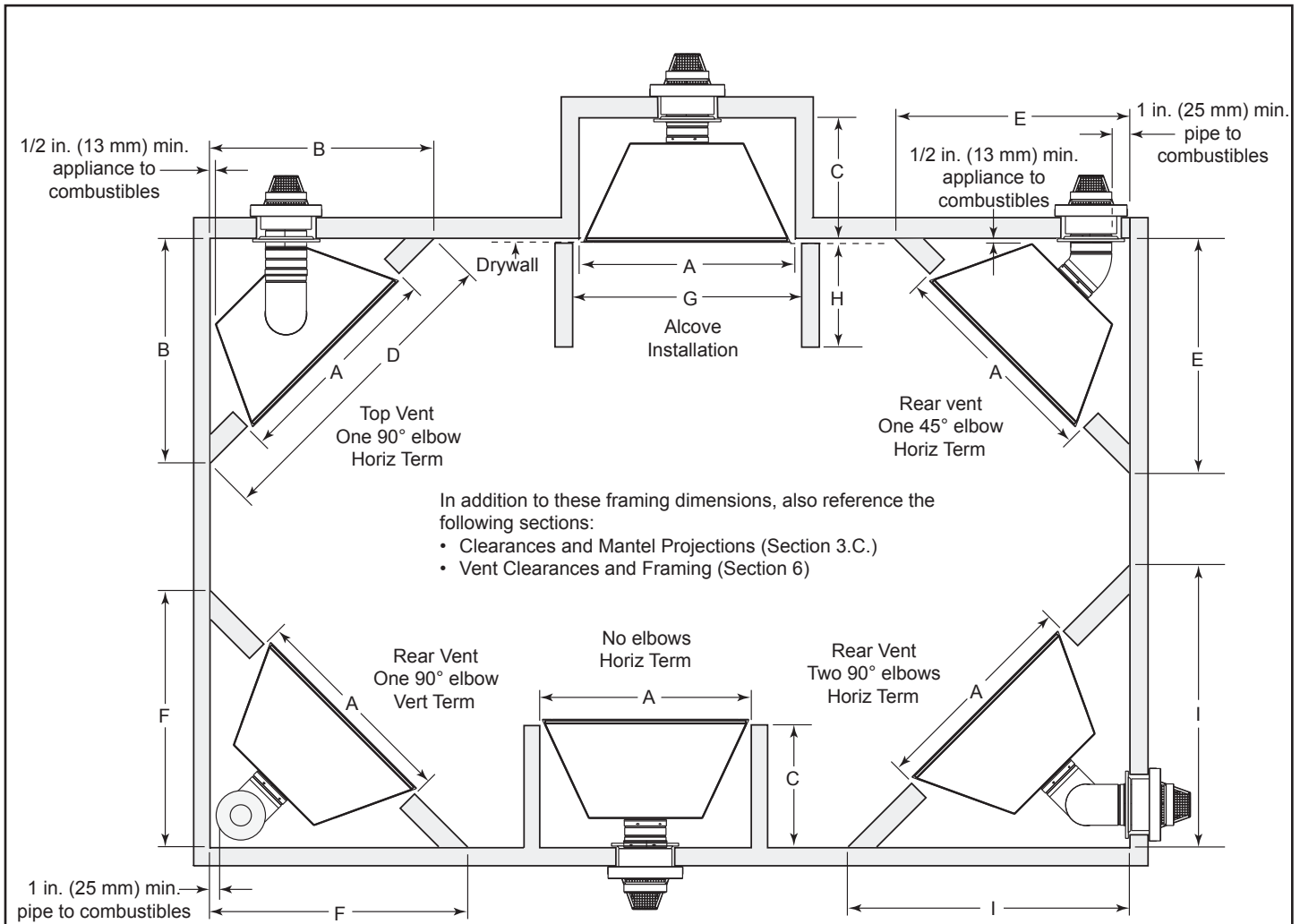
# 5 Framing and Clearances

## A. Select Appliance Location

When selecting a location for the appliance it is important to consider the required clearances to walls (see Figure 5.1).

**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.



Model #		A	B	C	D	E	F	G	H	I
CD4236	in.	42	50 5/8	23	71 5/8	50 5/8	52 5/8	43	48	59 3/4
	mm	1067	1286	584	1819	1286	1337	1092	1219	1518
CD4842	in.	48	55 1/4	23	78 1/4	55 1/4	55 1/4	49	48	59 3/4
	mm	1219	1403	584	1988	1403	1403	1245	1219	1518

Figure 5.1 Appliance Locations

## B. Construct 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

**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.

**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.
- Failure to maintain airspace may cause overheating and a fire.

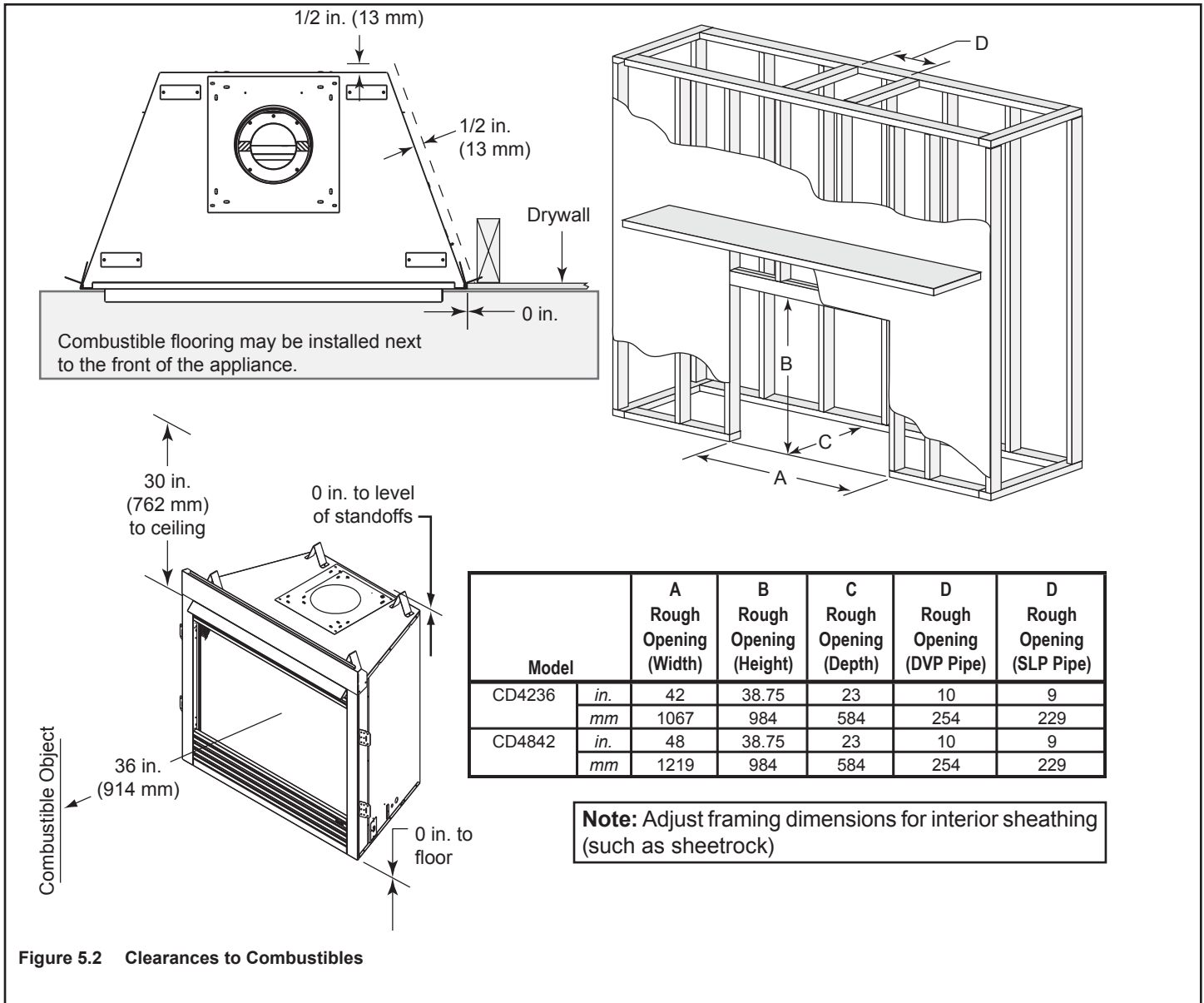


Figure 5.2 Clearances to Combustibles

## D. Mantel and Wall Projections

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

### Mantels

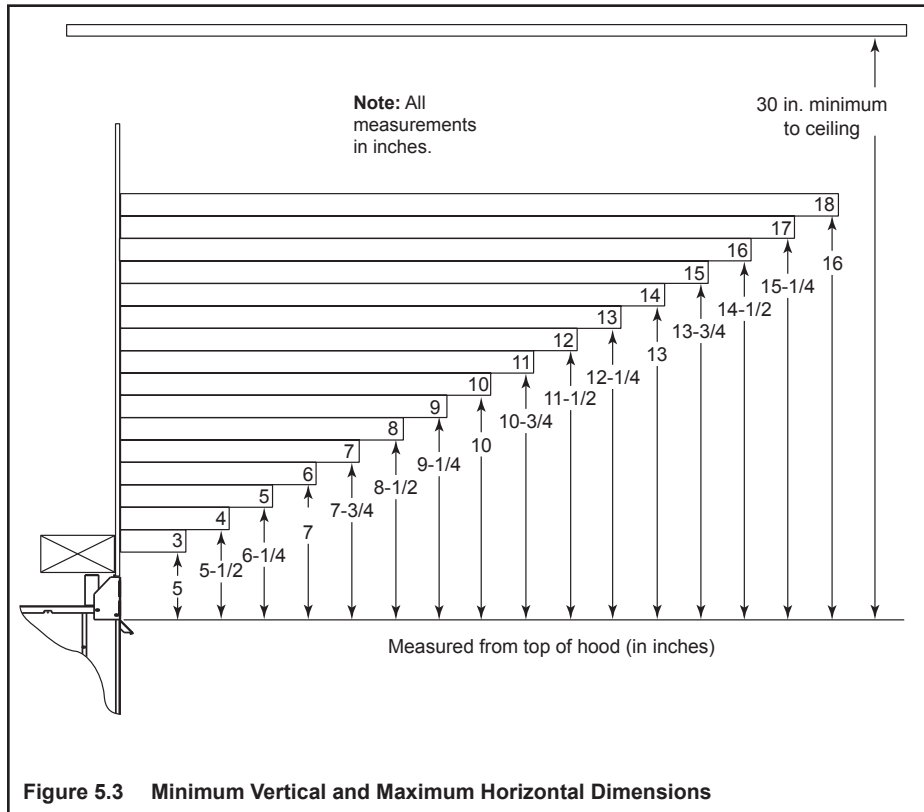


Figure 5.3 Minimum Vertical and Maximum Horizontal Dimensions

### Mantel Legs or Wall Projections

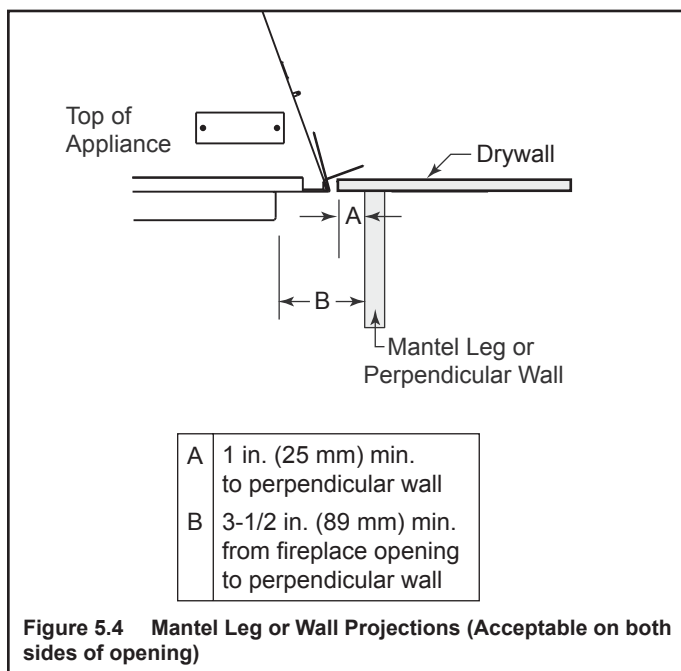


Figure 5.4 Mantel Leg or Wall Projections (Acceptable on both sides of opening)

# 6 Termination Locations

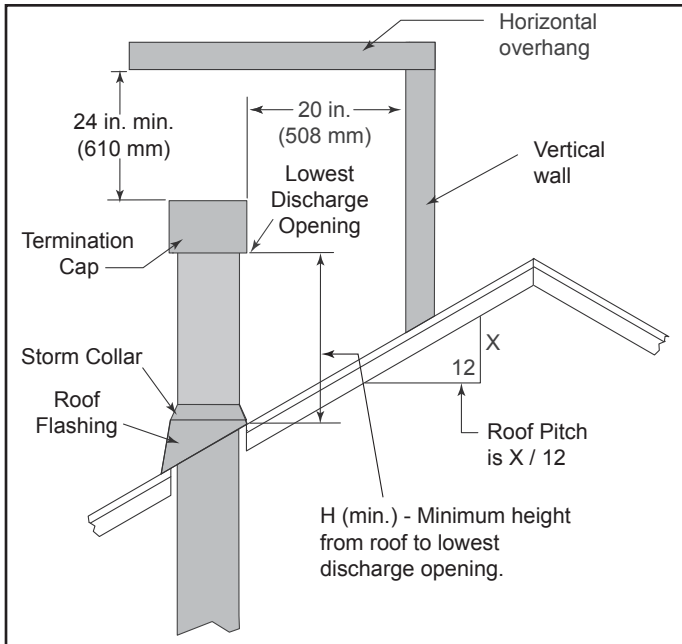
## A. Vent Termination Minimum Clearances

**⚠ 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.



Roof Pitch	H (Min.) Ft.	Roof Pitch	H (Min.) Ft.
Flat to 6/12	1.0*	Over 11/12 to 12/12	4.0
Over 6/12 to 7/12	1.25*	Over 12/12 to 14/12	5.0
Over 7/12 to 8/12	1.5*	Over 14/12 to 16/12	6.0
Over 8/12 to 9/12	2.0*	Over 16/12 to 18/12	7.0
Over 9/12 to 10/12	2.5	Over 18/12 to 20/12	7.5
Over 10/12 to 11/12	3.25	Over 20/12 to 21/12	8.0

\* 3 ft. minimum in snow regions

**Figure 6.1 Minimum Height From Roof To Lowest Discharge Opening**

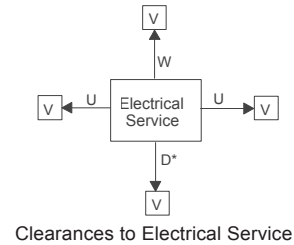
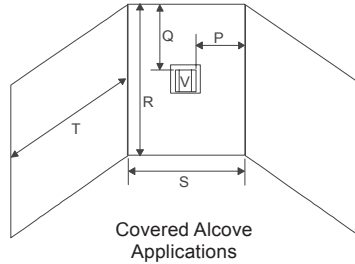
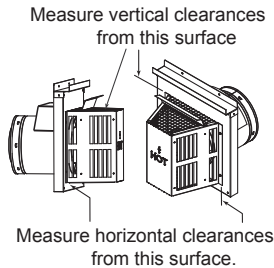
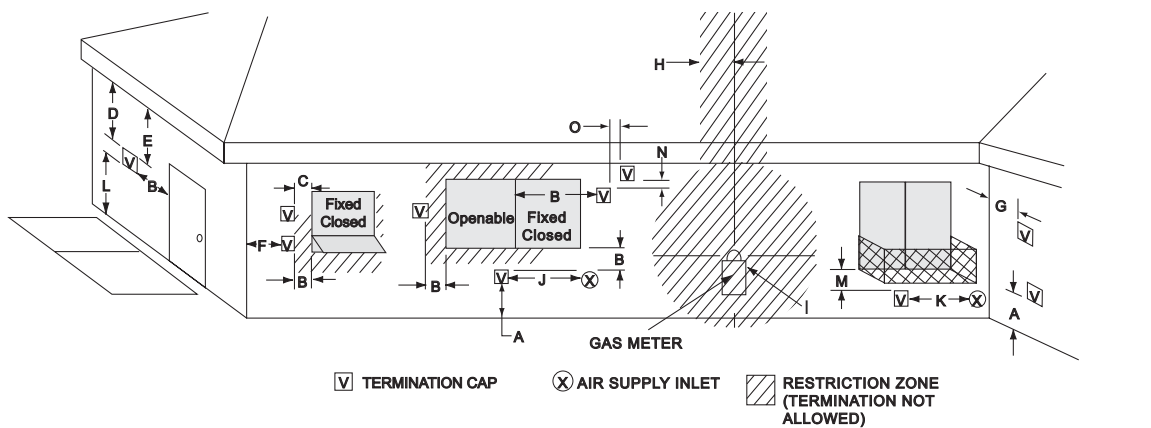
A	B
6 in. (minimum) up to 20 in. <i>152 mm/508 mm</i>	18 in. minimum <i>457 mm</i>
20 in. and over	0 in. minimum

Gas, Wood or Fuel Oil Termination Cap

\* If using decorative cap cover(s), this distance may need to be increased. Refer to the installation instructions supplied with the decorative cap cover.

\*\* In a staggered installation with both gas and wood terminations, the wood termination cap must be higher than the gas termination cap.

**Figure 6.2 Multiple Termination Caps**



**Dimension Descriptions**

- A Clearance above the ground, a veranda, porch, deck or balcony - 12 in. (30 cm) minimum. \*
- B Clearance to window or door that may be opened – 10,000 BTUs or less, 6 in. (15 cm) minimum; 10,000-50,000 BTUs, 9 in. (23 cm) minimum; over 50,000 BTUs, 12 in. (30 cm) minimum. \*
- C Clearance to permanently closed window – 12 in. (30 cm) minimum - recommended to prevent condensation on window.
- D Vertical clearance to ventilated soffit located above the termination within a horizontal distance of 2 ft (60 cm) from the centerline of the termination – 18 in. (46 cm) minimum. \*\*
- E Vertical clearance to unventilated soffit - 12 in. (30 cm) minimum. \*\*
- F Clearance to outside corner - 6 in. (15 cm) minimum.
- G Clearance to inside corner - 6 in. (15 cm) minimum.
- H Not to be installed above a meter/regulator assembly within 3 ft (90 cm) horizontally\* from the center line of the regulator (Canada only)
- I Clearance to service regulator vent outlet – 3 ft (.91 m) U.S. minimum and 3 ft (.91 m) Canada minimum. \*
- J Clearance to non-mechanical air supply inlet into building or the combustion air inlet to any other appliance – 9” (23 cm) U.S. minimum and 12 in. (30 cm) Canada minimum. \*
- K Clearance to mechanical air supply inlet - 3 ft (.91 m) U.S. minimum and 6 ft (1.8 m) Canada minimum. \*
- L Clearance above a paved sidewalk or paved driveway located on public property - 7 ft (2.1 m) minimum.  
A vent may not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.
- M Clearance under veranda, porch, deck or balcony - 12 in. (30 cm) minimum. \* Recommended 30 in. (76 cm) for vinyl or plastic.  
Only permitted if veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor. \*
- N Vertical clearance between two horizontal termination caps – 12 in. (30 cm) minimum.
- O Horizontal clearance between two horizontal termination caps – 12 in. (30 cm) minimum.

- P 6” - Non-vinyl sidewalls  
12” – Vinyl sidewalls
- Q 18” – Non-vinyl soffit and overhang  
42” – Vinyl soffit and overhang
- R 8 ft.

	<b>S<sub>min</sub></b>	<b>T<sub>max</sub></b>
1 cap	3 ft	2 x S actual
2 caps	6 ft	1 x S actual
3 caps	9 ft	2/3 x S actual
4 caps	12 ft	1/2 x S actual
S <sub>min</sub> = # term caps x 3		T <sub>max</sub> = (2/# term caps) x S (actual)

- U 6” min. – Clearance from sides of electrical service.
- W 12” min. – Clearance above electrical service.
- \* As specified in CGA B149 Installation Codes  
Note: Local codes or regulations may require different clearances.
- \*\* Clearance required to vinyl soffit material – 30 in. (76 cm) minimum.  
Note: Location of the vent termination must not interfere with access to the electrical service.

**WARNING!**

In the U.S.: Vent system termination is NOT permitted in screened porches. You must follow side wall, overhang and ground clearances as stated in the instructions.

In Canada: Vent system termination is NOT permitted in screened porches. Vent system termination is permitted in porch areas with two or more sides open. You must follow all side wall, overhang and ground clearances as stated in the instructions.

Hearth & Home Technologies assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.

**Figure 6.3 Minimum Clearances for Termination**

**CAUTION: IF EXTERIOR WALLS ARE FINISHED WITH VINYL SIDING, IT IS SUGGESTED THAT A VINYL PROTECTOR KIT BE INSTALLED.**

# 7 Vent Information and Diagrams

## A. Approved Pipe

This appliance is approved for use with Hearth & Home Technologies DVP and/or SLP venting systems. Refer to Section 17.B for vent component information.

**DO NOT** mix pipe, fittings or joining methods from different manufacturers.

The pipe is tested to be run inside an enclosed wall. There is no requirement for inspection openings at each joint within the wall.

**WARNING! Risk of Fire or Asphyxiation.** This appliance requires a separate vent. **DO NOT** vent to a pipe serving a separate solid fuel burning appliance.

## B. Vent Table Key

The abbreviations listed in this vent table key are used in the vent diagrams.

Symbol	Description
V <sub>1</sub>	First section (closest to appliance) of vertical length
V <sub>2</sub>	Second section of vertical length
H <sub>1</sub>	First section (closest to appliance) of horizontal length
H <sub>2</sub>	Subsequent sections of horizontal length

## C. Use of Elbows

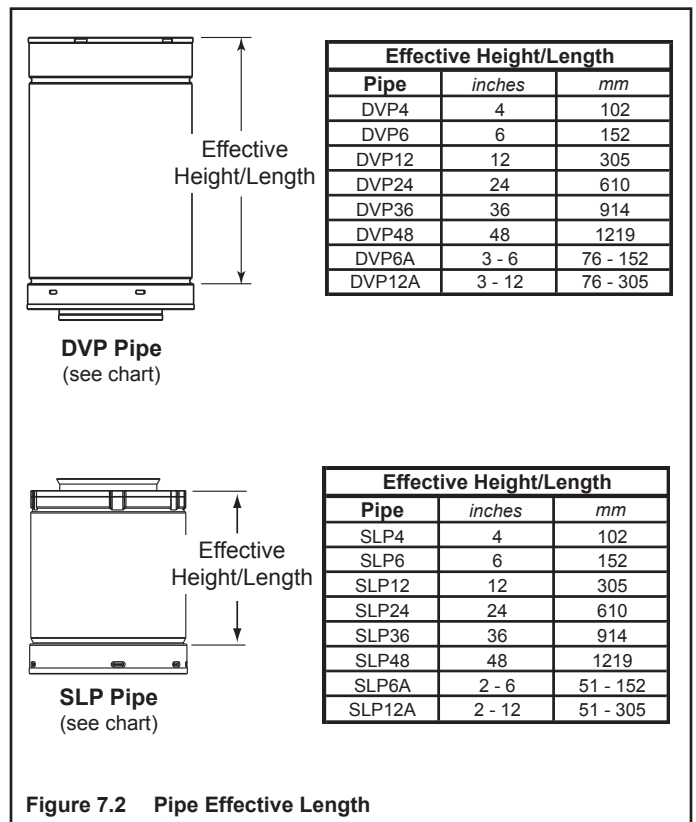
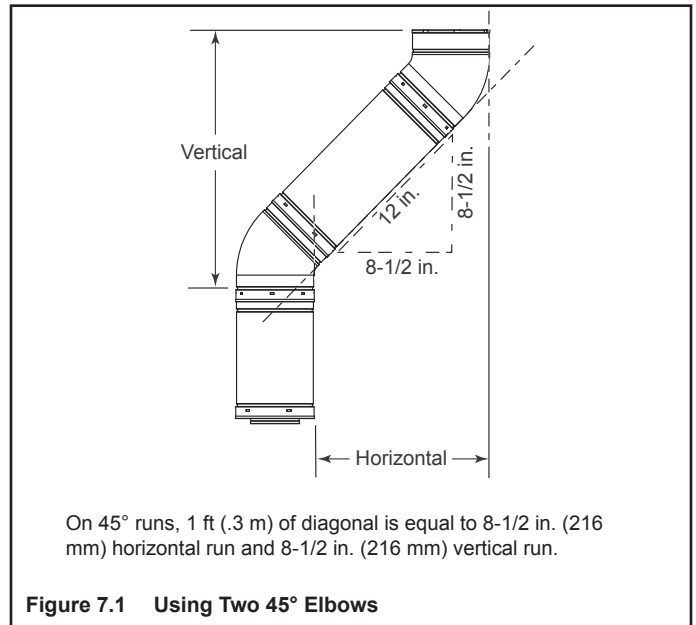
Diagonal runs have both vertical and horizontal vent aspects when calculating the effects. Use the rise for the vertical aspect and the run for the horizontal aspect (see Figure 7.1).

Two 45° elbows may be used in place of one 90° elbow. On 45° runs, one foot of diagonal is equal to 8-1/2 in. (216 mm) horizontal run and 8-1/2 in. (216 mm) vertical run. A length of straight pipe is allowed between two 45° elbows (see Figure 7.1).

## D. Measuring Standards

Vertical and horizontal measurements listed in the vent diagrams were made using the following standards.

- Pipe measurements are shown using the effective length of pipe (see Figure 7.2).
- Horizontal terminations are measured to the outside mounting surface (flange of termination cap).
- Vertical terminations are measured to bottom of termination cap.
- Horizontal pipe installed level with no rise.



## E. Vent Diagrams

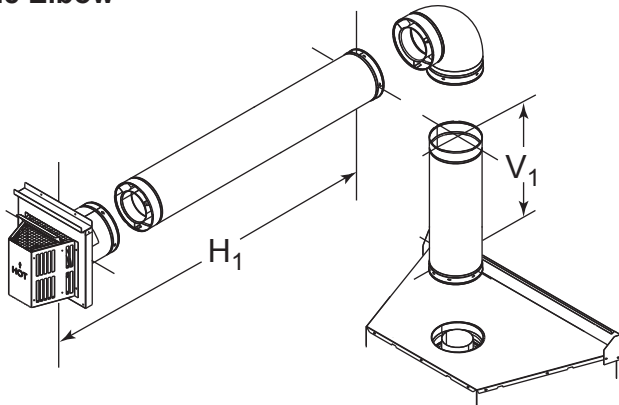
To replace the first starter elbow with two 45° elbows, refer to Figure 7.4. All other 90° elbows can be replaced with two 45° elbows.

General Rules:

- SUBTRACT 3 ft. from the total H measurement for each 90° elbow installed horizontally.
- SUBTRACT 1-1/2 ft. from the total H measurement for each 45° elbow installed horizontally.
- A maximum of three 90° elbows (or six 45° elbows) may be used in any vent configuration. Some elbows may be installed horizontally. See Figure 7.9.
- Elbows may be placed back to back anywhere in the system as long as the first 90° elbow is a starter elbow except as shown in Figure 7.4.
- When penetrating a combustible wall, a wall shield firestop must be installed.
- When penetrating a combustible ceiling, a ceiling firestop must be installed.
- Horizontal runs of vent do not require vertical rise; horizontal runs may be level.

### 1. Top Vent - Horizontal Termination

#### One Elbow



V <sub>1</sub> min.		V <sub>1</sub> max.		H <sub>1</sub> max.	
ft	m	ft	m	ft	m
0	0.00	-	-	1.5	0.46
0.5	0.15	-	-	6	1.83
1	0.30	-	-	11	3.35
1.5	0.46	-	-	18	5.49
2	0.61	-	-	25	7.62
<b>DVP</b>		25	7.62	25	7.62
<b>SLP</b>		23	7.01	23	7.01

You may install a DVP elbow directly on top of the CD4236. The CD4842 requires the DVP6 vent section prior to the elbow.

Figure 7.3

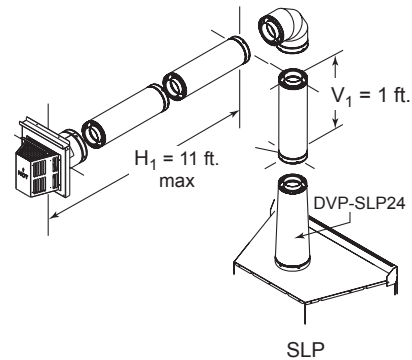
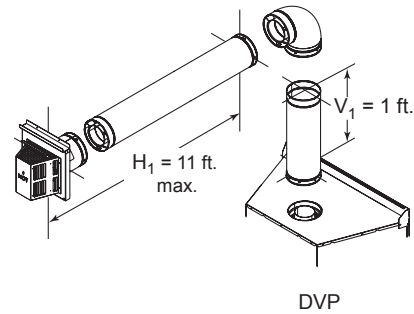
**Note: The CD series appliances can adapt to SLP series vent pipe when venting off the top of the appliance. You must use a DVP-SLP24 adapter which can only be attached to the appliance starting collar.**

When looking at horizontal termination diagrams, the adapter is not counted as part of the minimum vertical (V<sub>1</sub> min.) requirements.

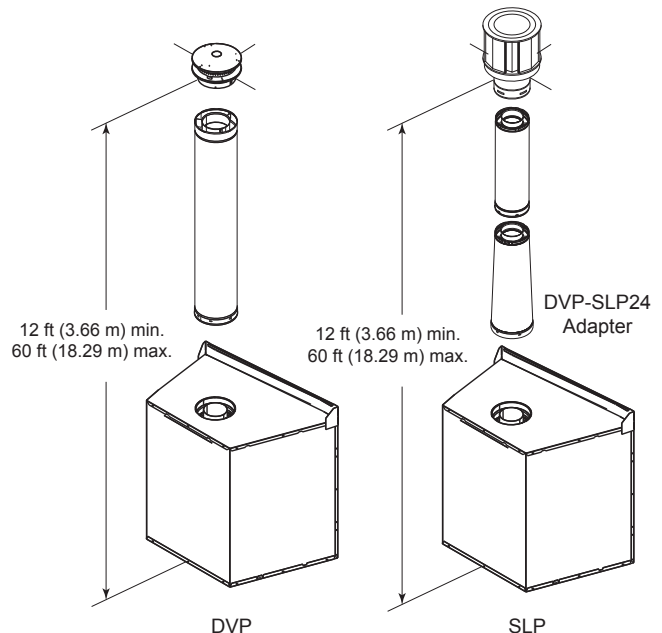
Whether horizontal or vertical termination, the adapter is counted as part of the maximum vertical limitations.

All venting rules for the vent run must still be followed.

#### HORIZONTAL EXAMPLE



#### VERTICAL EXAMPLE





# 1. Top Vent - Horizontal Termination - (continued)

## Two 45° Elbows replacing One 90° Elbow

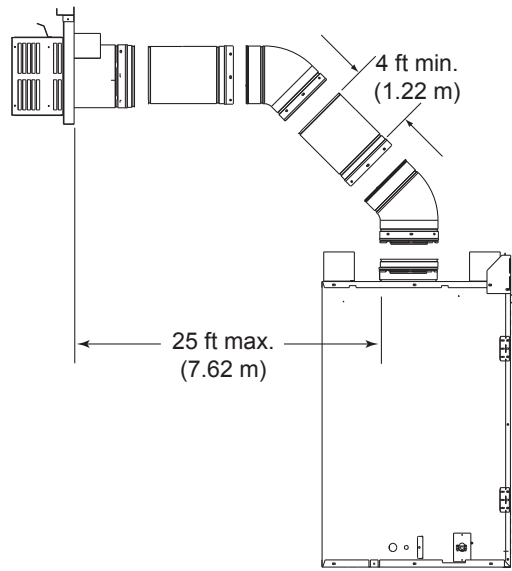


Figure 7.4

## Two Elbows

$V_1$ min.		$V_1$ max.		$H_1+H_2$ max.		$H_1+H_2+H_3$ max.	
ft	m	ft	m	ft	m	ft	m
0.5	0.15	-	-	6	1.83	-	-
1	0.30	-	-	11	3.35	11	3.35
1.5	0.46	-	-	18	5.49	18	5.49
2	0.61	-	-	25	7.62	25	7.62
<b>DVP</b>		25	7.62	25	7.62	25	7.62
<b>SLP</b>		23	7.01	25	7.62	25	7.62

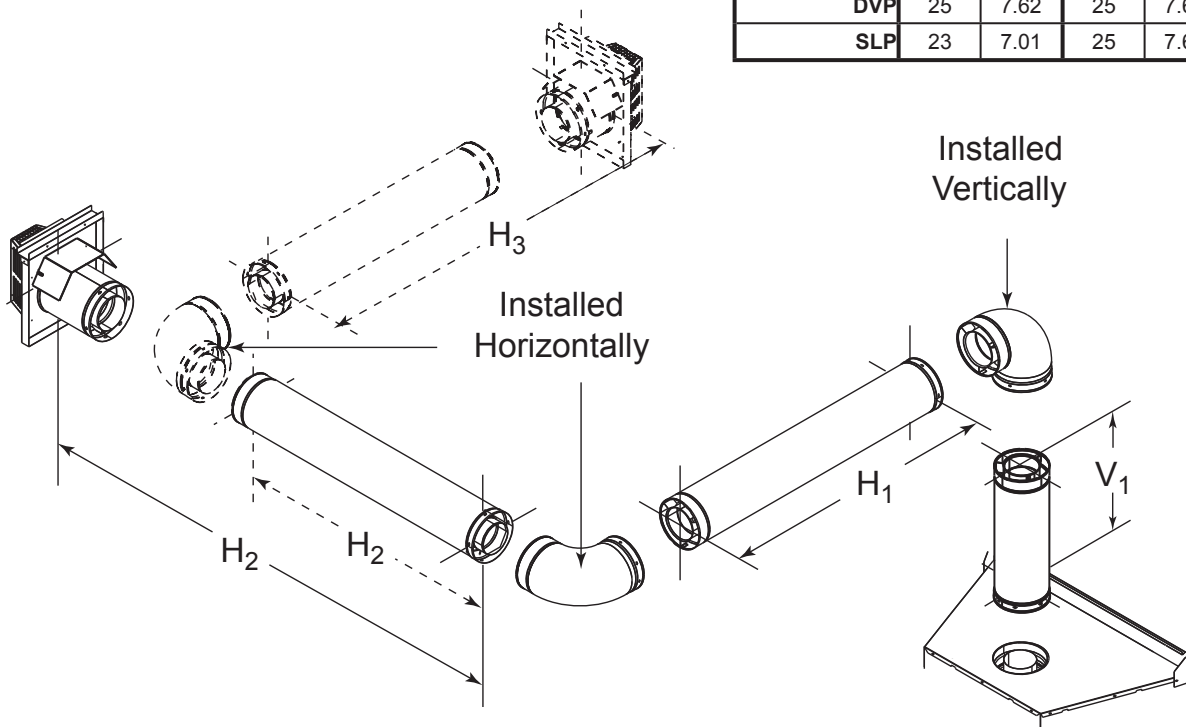


Figure 7.5

# 1. Top Vent - Horizontal Termination - (continued)

## Three Elbows

	V <sub>1</sub> min.		V <sub>1</sub> + V <sub>2</sub> max.		H <sub>1</sub> +H <sub>2</sub> max.	
	ft	m	ft	m	ft	m
DVP	1	0.30	24	7.32	19	5.79
SLP	1	0.30	22	6.71	19	5.79

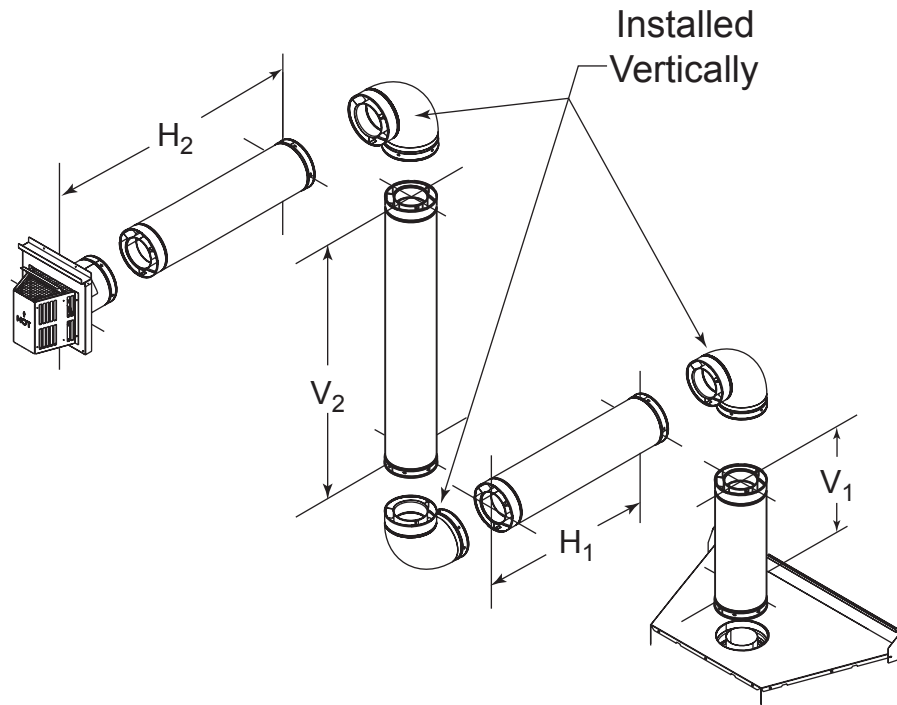
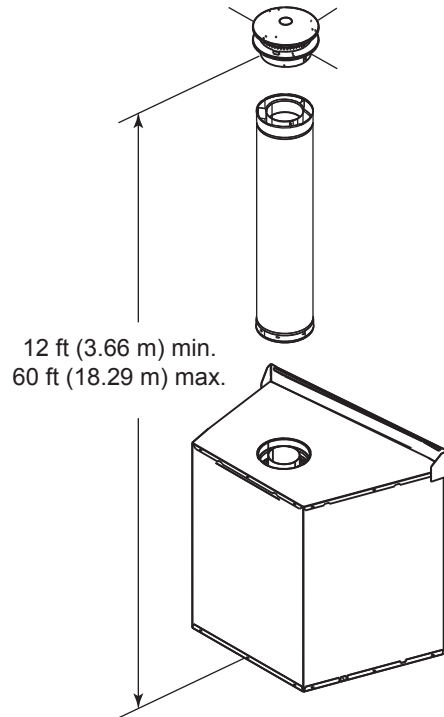


Figure 7.6

## 2. Top Vent - Vertical Termination

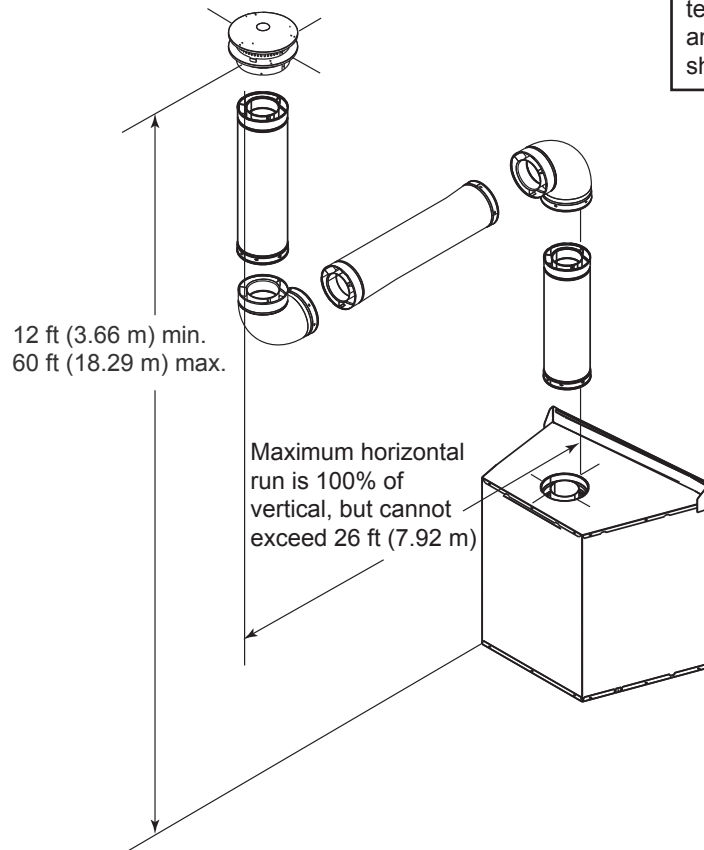
### No Elbow



**Note:** If installing a vertical vent/termination off the top of the appliance, the vertical termination baffle should be used.

Figure 7.7

### Two Elbows



**Note:** If installing a vertical vent/termination off the top of the appliance, the vertical termination baffle should be used.

Figure 7.8

## 2. Top Vent - Vertical Termination - (continued)

### Three Elbows

**Note:** If installing a vertical vent/termination off the top of the appliance, the vertical termination baffle should be used.

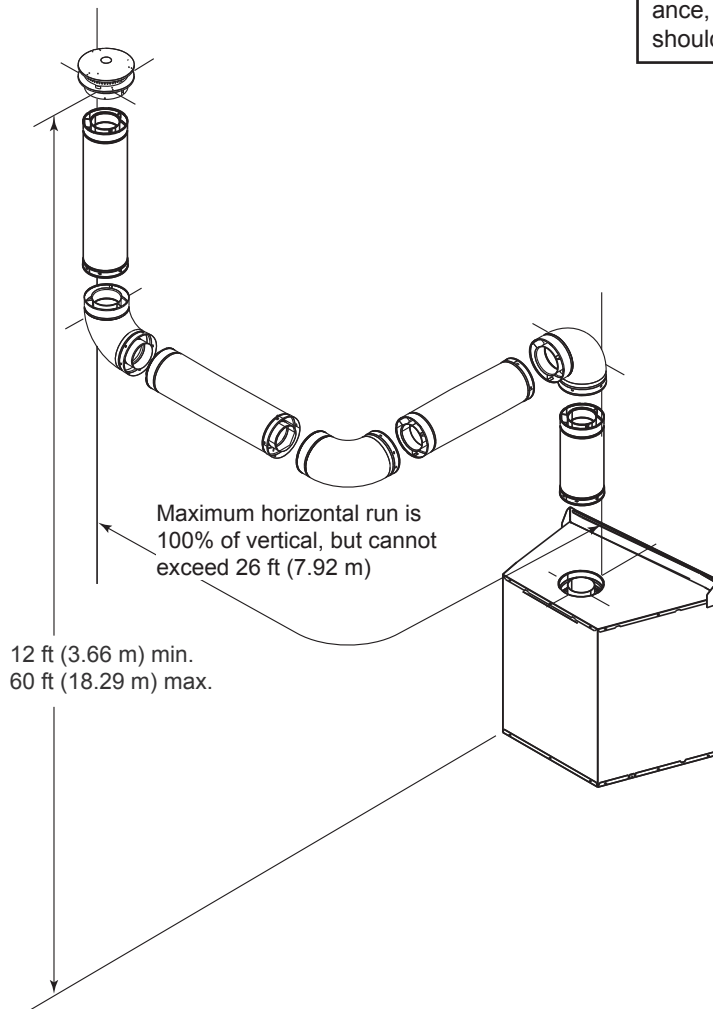


Figure 7.9

### 3. Rear Vent - Horizontal Termination

---

#### No Elbow

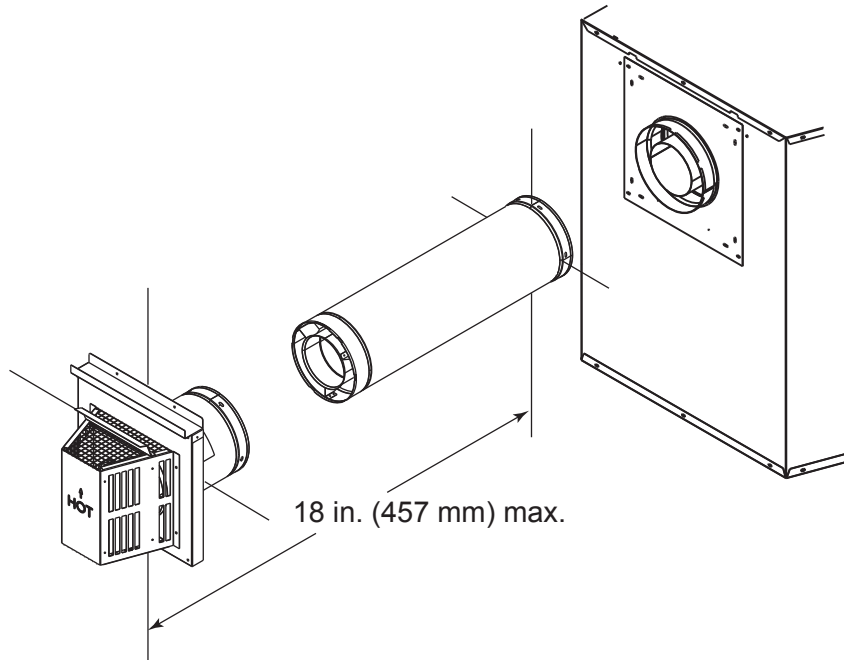


Figure 7.10

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#### One 45° Elbow

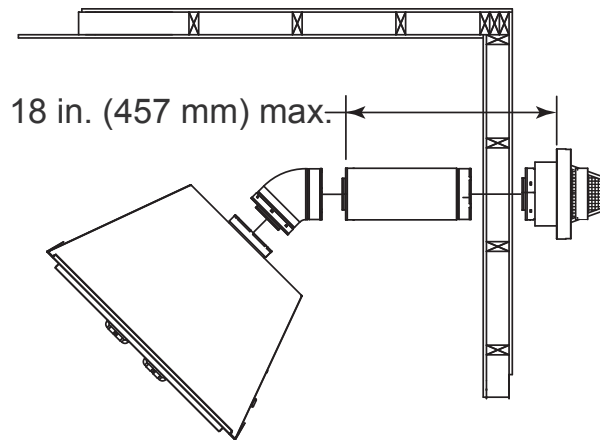


Figure 7.11

### 3. Rear Vent - Horizontal Termination - (continued)

#### Two Elbows

H <sub>1</sub> max.		V <sub>1</sub> min.		H <sub>1</sub> +H <sub>2</sub> max.	
ft	m	ft	m	ft	m
2	0.61	1	0.30	3	0.91
4	1.22	2	0.61	6	1.83
6	1.83	3	0.91	9	2.74
8	2.44	4	1.22	12	3.66
8	2.44	5	1.52	15	4.57
8	2.44	6	1.83	18	5.49

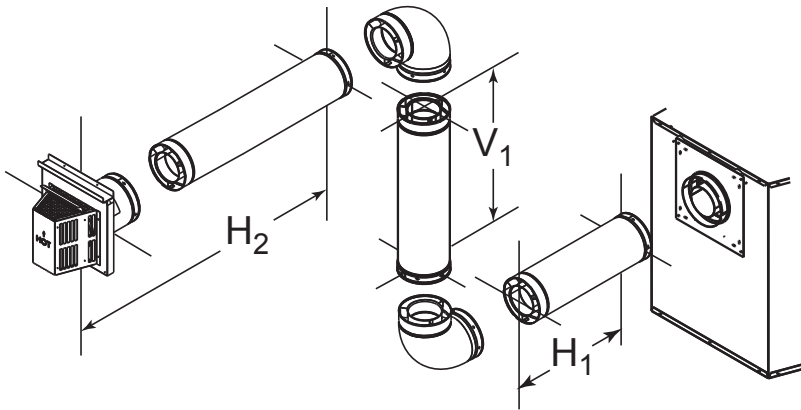


Figure 7.12

#### Three Elbows

H <sub>1</sub> max.		V <sub>1</sub> min.		H <sub>1</sub> +H <sub>2</sub> +H <sub>3</sub> max.	
ft	m	ft	m	ft	m
2	0.61	1	0.30	3	0.91
4	1.22	2	0.61	6	1.83
6	1.83	3	0.91	9	2.74
8	2.44	4	1.22	12	3.66
8	2.44	5	1.52	15	4.57
8	2.44	6	1.83	18	5.49

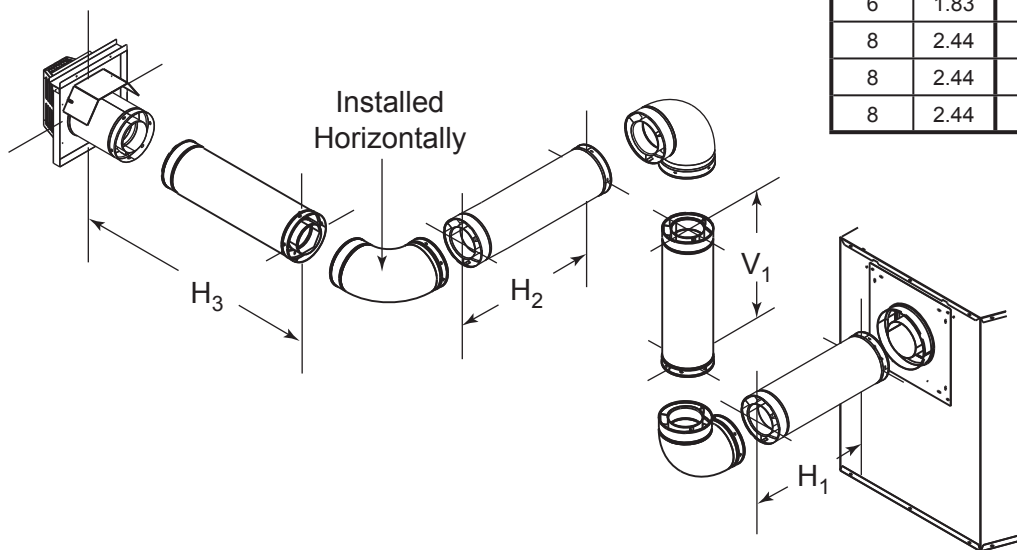


Figure 7.13

## 4. Rear Vent - Vertical Termination

### One Elbow

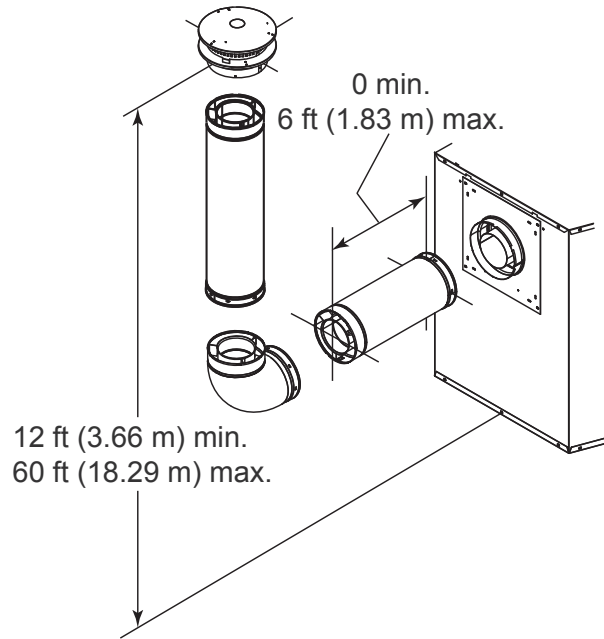


Figure 7.14

### Two Elbows

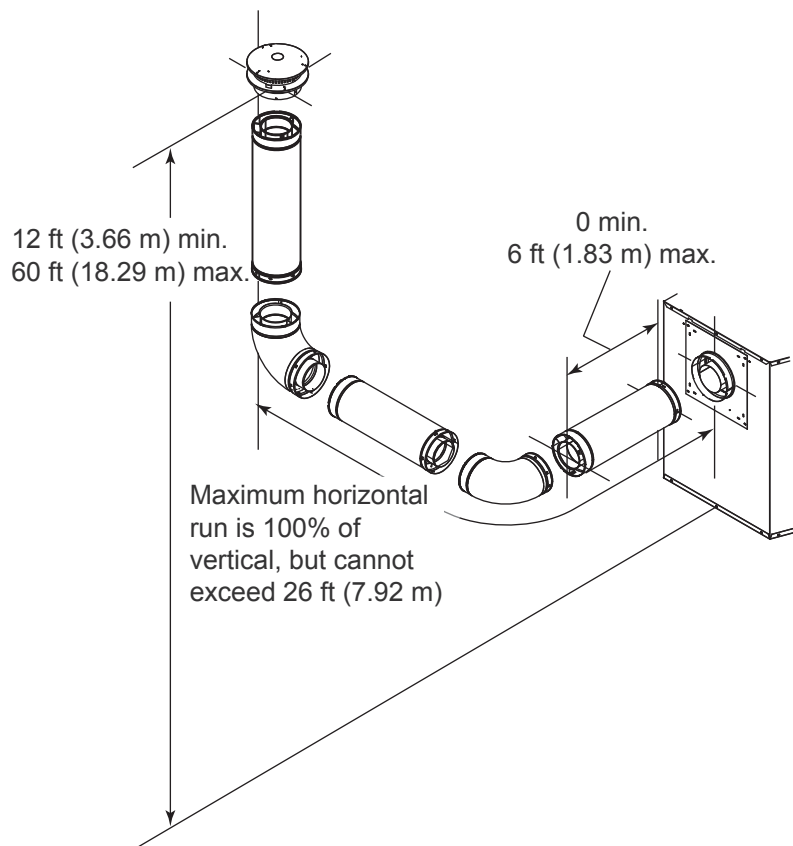


Figure 7.15

#### 4. Rear Vent - Vertical Termination - (continued)

##### Three Elbows

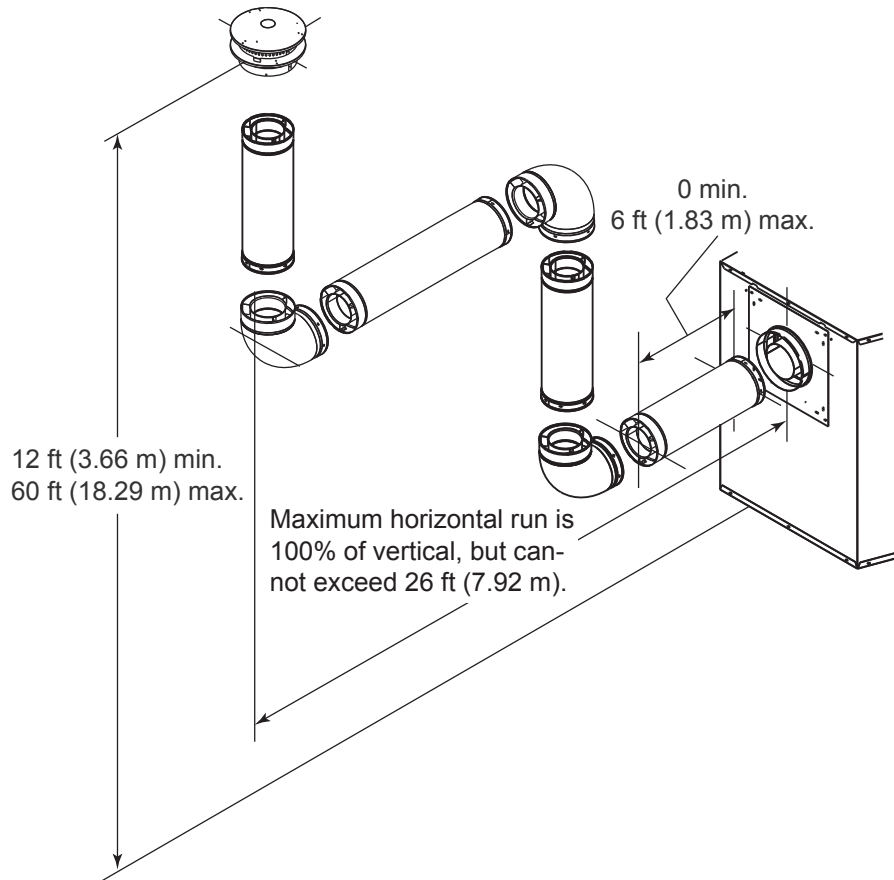


Figure 7.16



## F. Install Vertical Termination Baffle

**Note:** For vertically terminated installations only.

**Note:** If installing a vertical vent/termination run off the top or rear of the appliance, the vertical termination baffle supplied with the appliance may be used.

- Remove the glass (refer to Section 15.J.) to access the firebox and 5 in. inner flue.
- Fold the baffle (Figure 7.17) to an approximate 90° angle (see Figure 7.18).

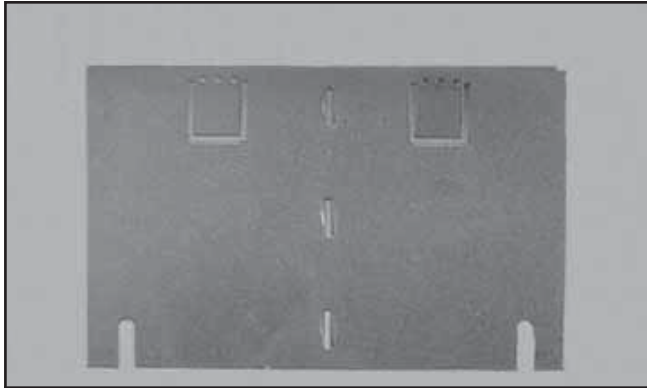


Figure 7.17 Flat Baffle

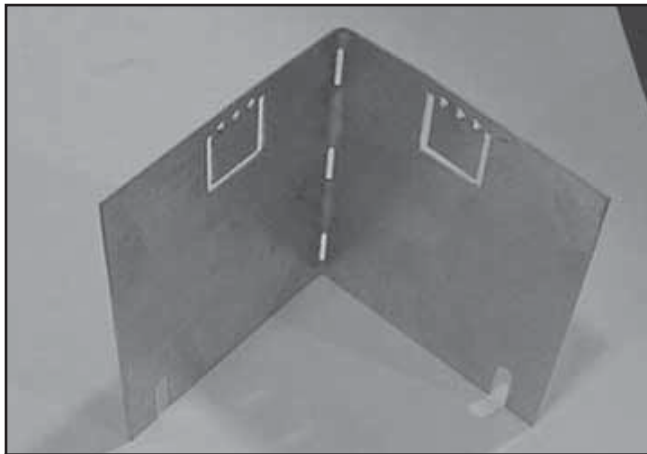


Figure 7.18 Baffle Bent to 90° Angle

- Squeeze the open end of the bent baffle with one hand. Insert the baffle bent side up into the inner flue so that the bottom of the baffle is above the bead on the inside of the collar. See Figure 7.19.



Figure 7.19 Placing the Baffle

- Release pressure on the baffle so that it is wedged against the sides of the flue collar. See Figure 7.20.

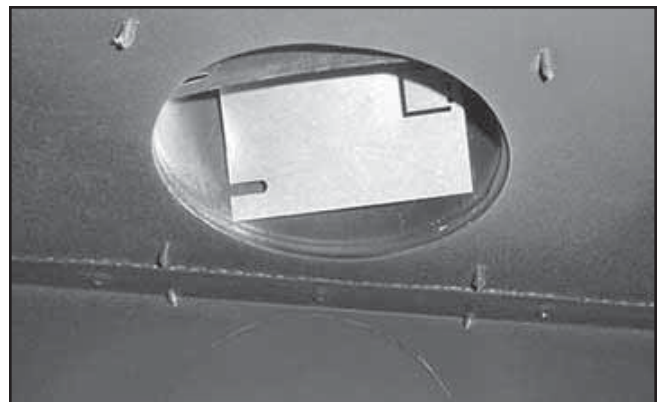


Figure 7.20 Baffle in Place

- Replace the glass (refer to Section 15.J.).
- Start the appliance.

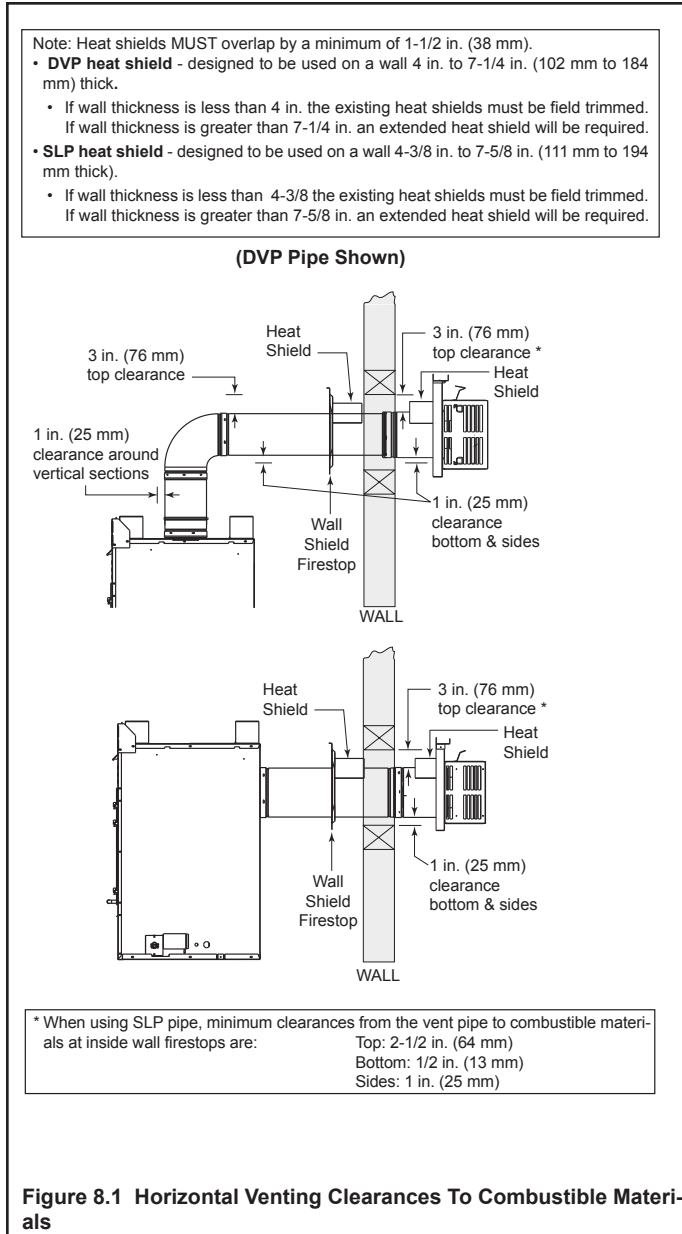
# 8 Vent Clearances and Framing

## A. Pipe Clearances to Combustibles

**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 Penetration Framing

### Combustible Wall Penetration

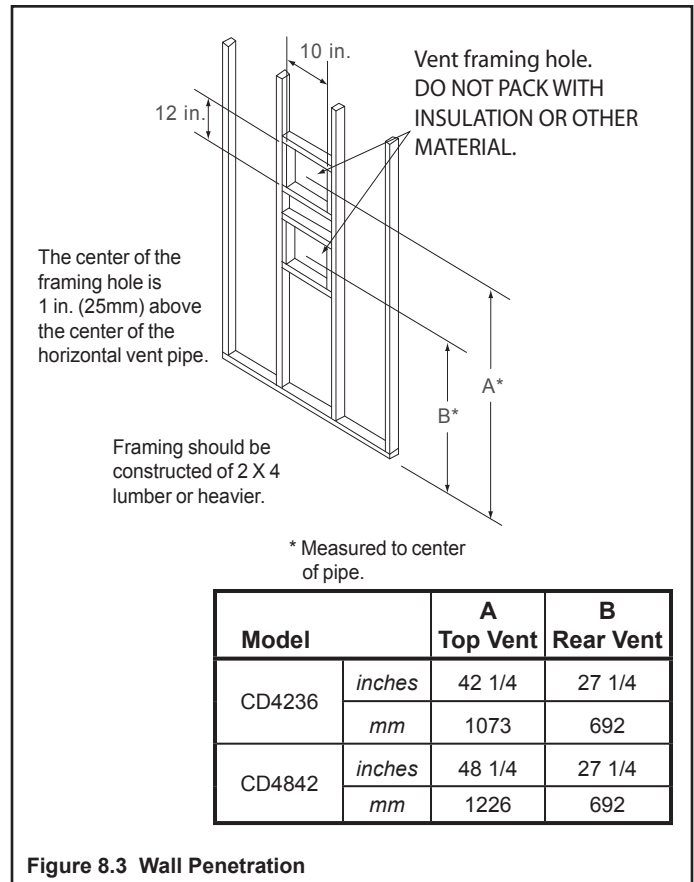
Whenever a combustible wall is penetrated, you must frame a hole for the wall shield firestop(s). The wall shield firestop maintains minimum clearances and prevents cold air infiltration.

- The opening must be framed on all four sides using the same size framing materials as those used in the wall construction.
- SLP pipe - A wall shield firestop must be placed on each side of an interior wall. A minimum 1 1/2 in. (38 mm) overlap of attached heat shields must be maintained.
- DVP pipe - A wall shield firestop is required on one side only on interior walls. If your local inspector requires a wall shield firestop on both sides, then both wall shield firestops must have a heat shield attached to them.
- See Section 10.L. for information for regarding the installation of a horizontal termination cap.

### Non-Combustible Wall Penetration

If the hole being penetrated is surrounded by non-combustible materials such as concrete, a hole with diameter one in. greater than the pipe is acceptable.

Whenever a non-combustible wall is penetrated, the wall shield firestop is only required on one side and no heat shield is necessary.



### C. Install the Ceiling Firestop

A ceiling firestop **MUST** be used between floors and attics.

- **DVP pipe only** - Frame an opening 10 in. by 10 in. (254 mm by 254 mm) whenever the vent penetrates a ceiling/floor (see Figure 8.4).
- **SLP pipe only** - Frame opening 9 in. x 9 in. (229 mm x 229 mm) whenever the vent penetrates a ceiling/floor (see Figure 8.4).
- Frame the area with the same sized lumber as used in ceiling/floor joist.
- The ceiling firestop may be installed above or below the ceiling joists when installed with a attic insulation shield. It must be under joists between floors that are not insulated. Refer to Figure 8.5.
- Secure with three fasteners on each side.

**WARNING! Risk of Fire! DO NOT pack insulation around the vent. Insulation must be kept back from the pipe to prevent overheating.**

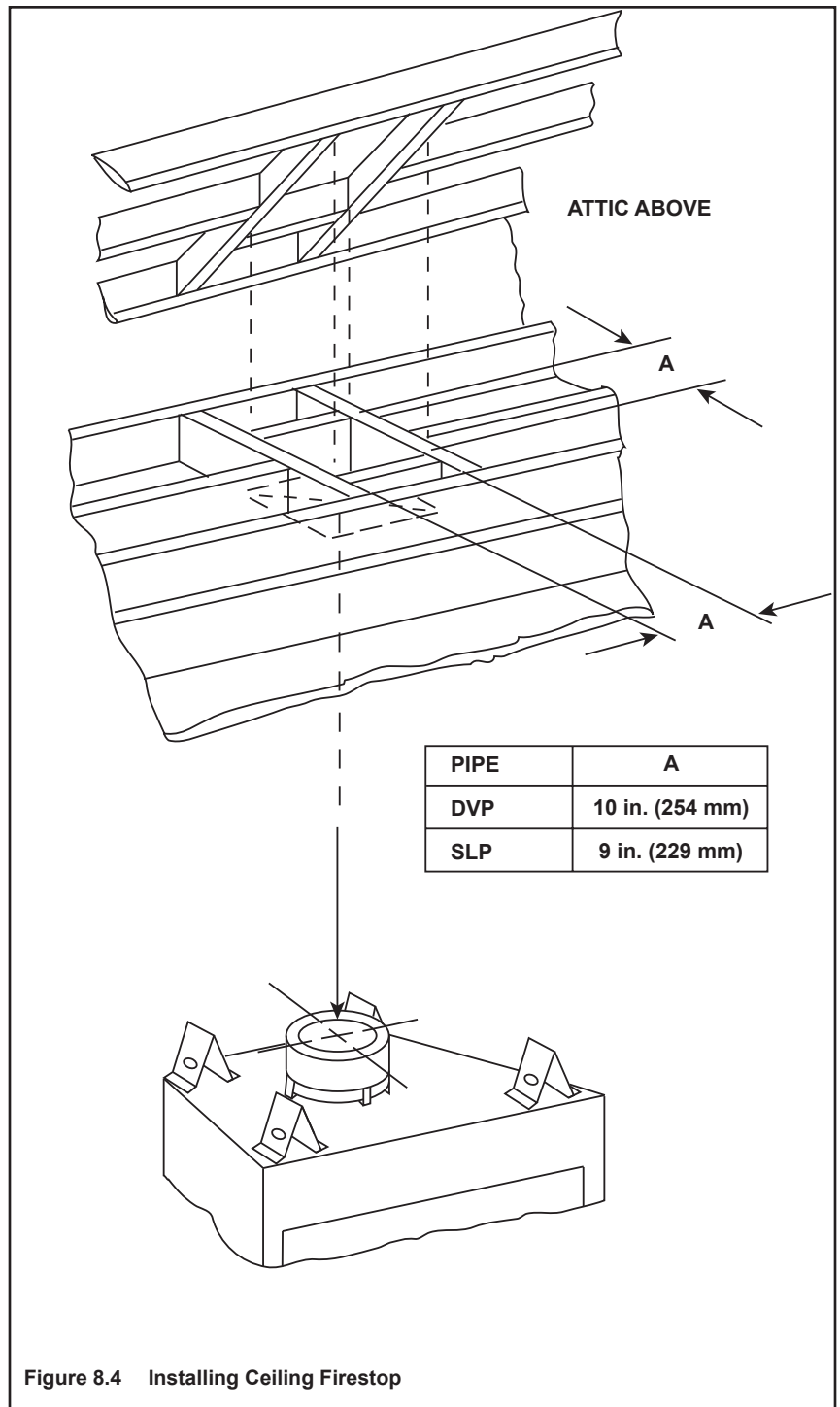


Figure 8.4 Installing Ceiling Firestop

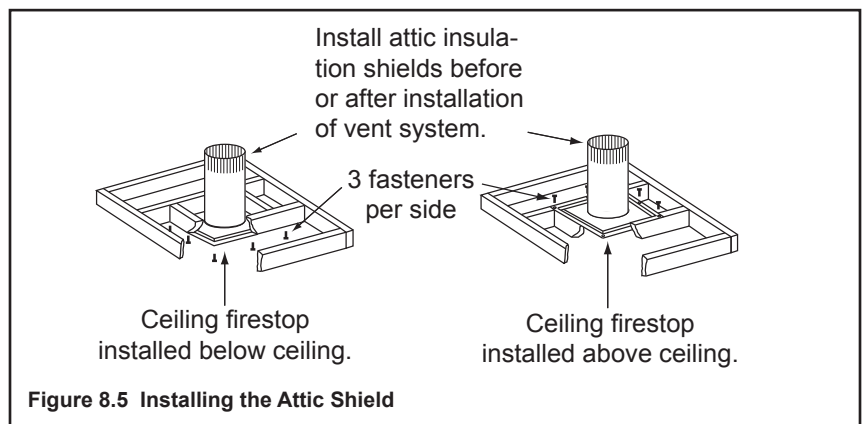


Figure 8.5 Installing the Attic Shield

## 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 specified clearance and be secured in place.

### Flat Ceiling Installation

- Remove one shield from box.

**NOTICE:** Cut previously installed batt insulation to make room for the attic insulation shield.

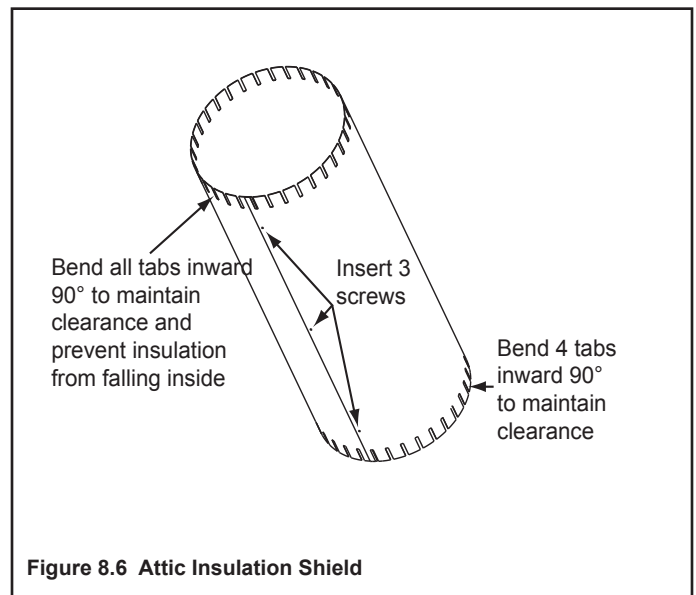
- Wrap shield around pipe if pipe is already installed in area to be insulated.
- Match the three holes in each side and fasten with three screws to form a tube.
- Bend three tabs on the bottom of the shield outward to allow attachment to the ceiling firestop.
- Bend the remaining bottom tabs inward 90° to maintain the air space between the pipe and the shield. Set the shield on the ceiling firestop and attach to the firestop.
- Bend all tabs inward 90° around the top of the shield. These tabs must be used to prevent blown insulation from getting between the shield and vent pipe, and to maintain air space clearance.

### Vaulted Ceiling Installation

- Remove one shield from box.

**NOTICE:** Cut previously installed batt insulation to make room for the attic insulation shield.

- Cut the attic insulation shield (if application is for vaulted ceiling), to fit your ceiling pitch. Snip cut edge to recreate 1 in. bend tabs all the way around the bottom.
- Wrap shield around pipe if pipe is already installed in area to be insulated.
- Match the three holes in each side and fasten with three screws to form a tube.
- Bend three tabs on the bottom of the shield outward to allow attachment to the ceiling firestop.
- Bend the remaining bottom tabs inward 90° to maintain the air space between the pipe and the shield. Set the shield on the ceiling firestop and attach to the firestop.
- Bend all tabs inward 90° around the top of the shield. These tabs must be used to prevent blown insulation from getting between the shield and vent pipe, and to maintain air space clearance.



# 9 Appliance Preparation

## A. Convert from Top Vent to Rear Vent

**CAUTION! Risk of Cuts, Abrasions or Flying Debris.**  
Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.

**NOTICE:** Once appliance is set up for top or rear venting, it CANNOT be changed at a later time.

- Remove the screw holding heat shield cover plate to top of appliance and set aside. See Figure 9.1

**Note:** If the appliance is to be top vented discard this plate and replace the screw you removed. If the appliance is to be rear vented, continue to the next step and Figure 9.2.

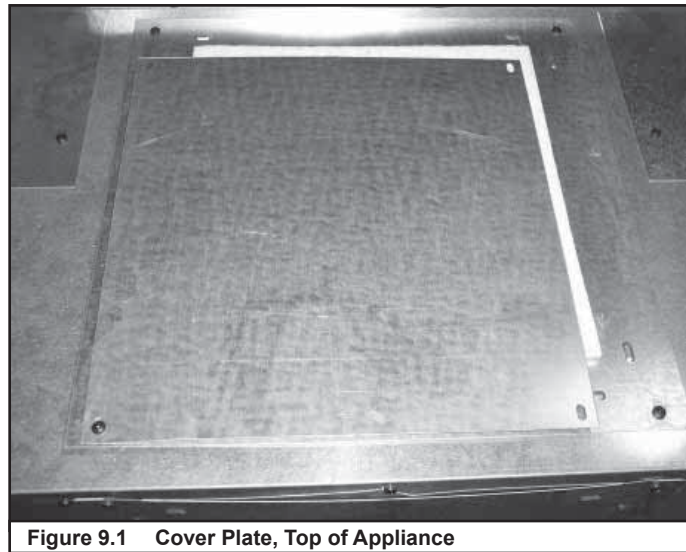


Figure 9.1 Cover Plate, Top of Appliance

- Remove the white insulation and set aside. See Figure 9.2.

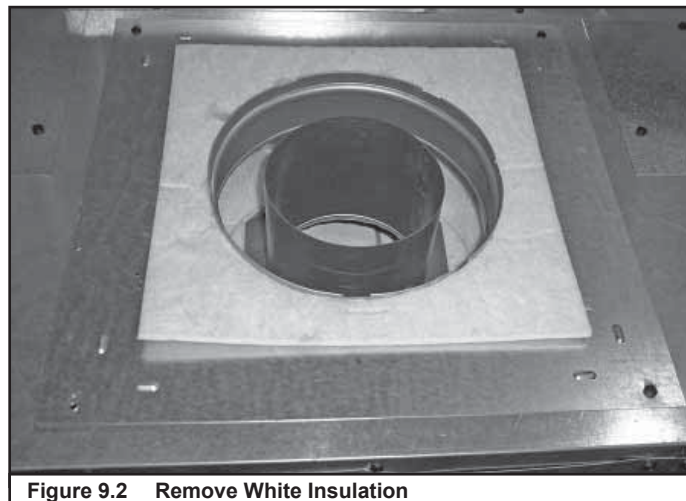


Figure 9.2 Remove White Insulation

- Remove three remaining screws holding the plate surrounding flue. See Figure 9.3. Remove plate and set aside.

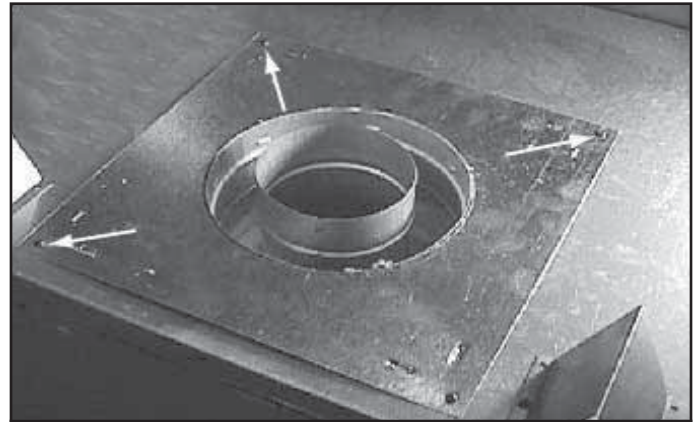


Figure 9.3 Cover Plate, Remove Screws

- Remove four screws holding inner plate surrounding the flue. See Figure 9.4. Remove inner plate and discard.

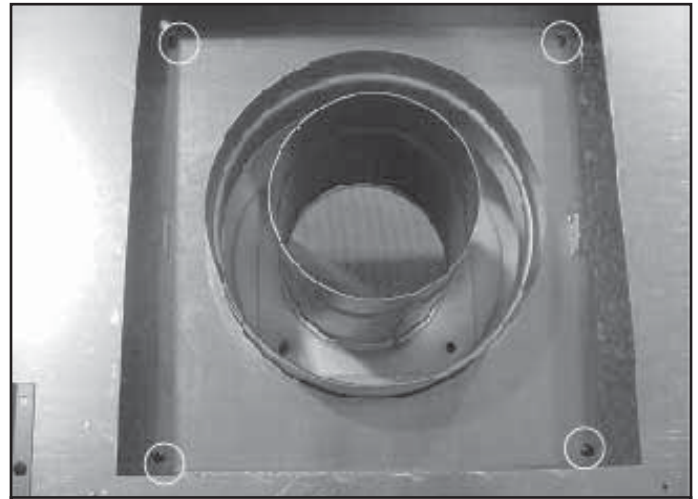
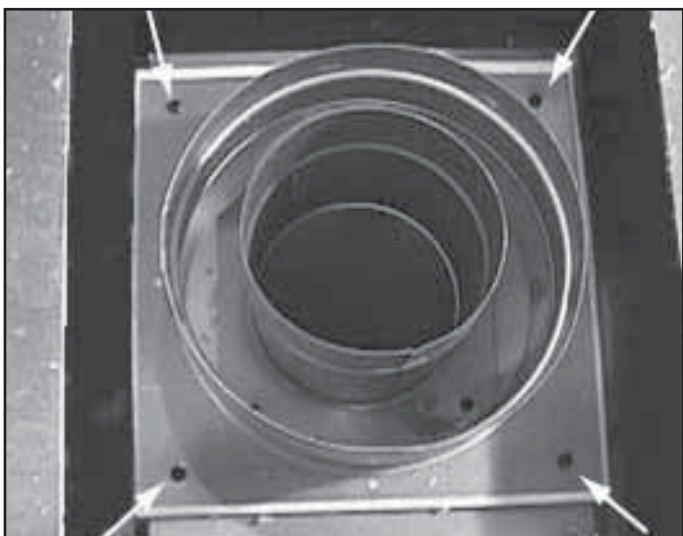


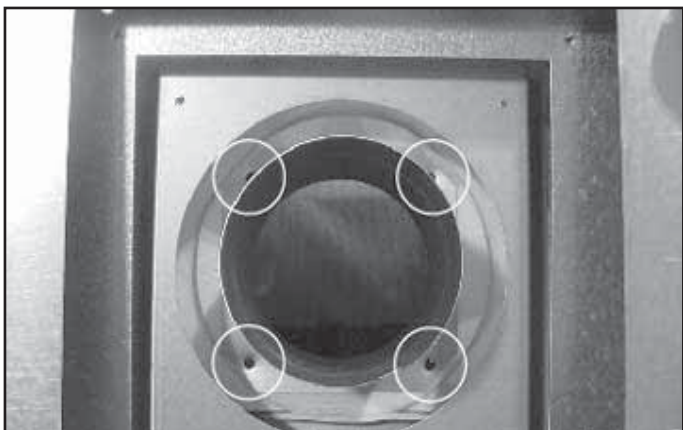
Figure 9.4 Inner Plate, Top of Appliance

- Remove four screws holding outer collar to appliance top. See Figure 9.5. Remove outer collar.



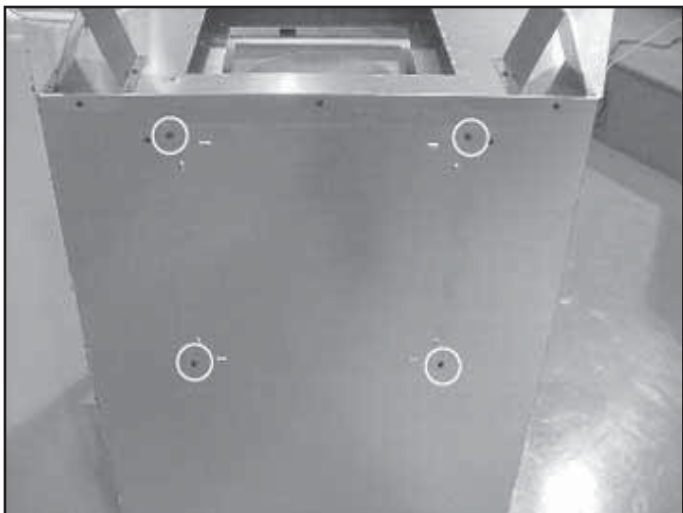
**Figure 9.5 Outer Collar, Remove Four Screws**

- Remove four screws holding inner collar to appliance top. See Figure 9.6. Remove inner collar.



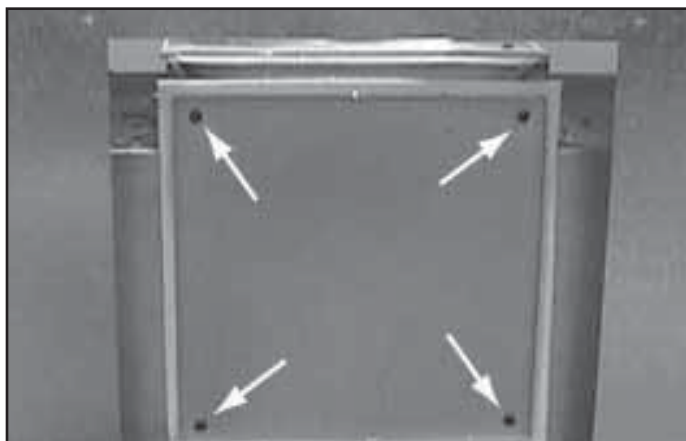
**Figure 9.6 Remove Four Inner Collar Screws**

- Remove four screws holding outer shell cover. See Figure 9.7. Remove outer shell cover and set aside.



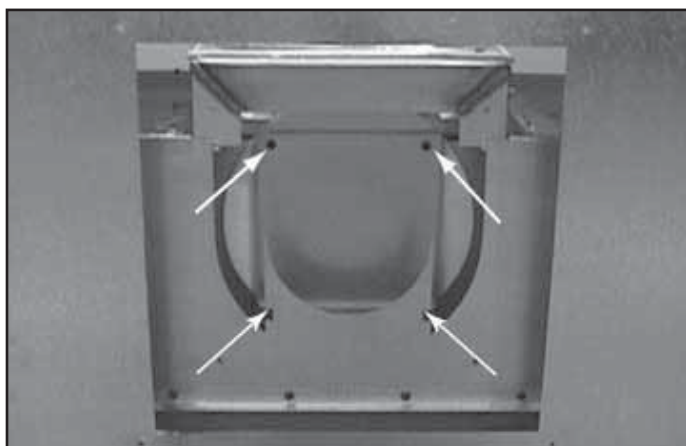
**Figure 9.7 Outer Shell Cover**

- Remove four screws holding outer cover plate to appliance back. See Figure 9.8. Remove outer cover.



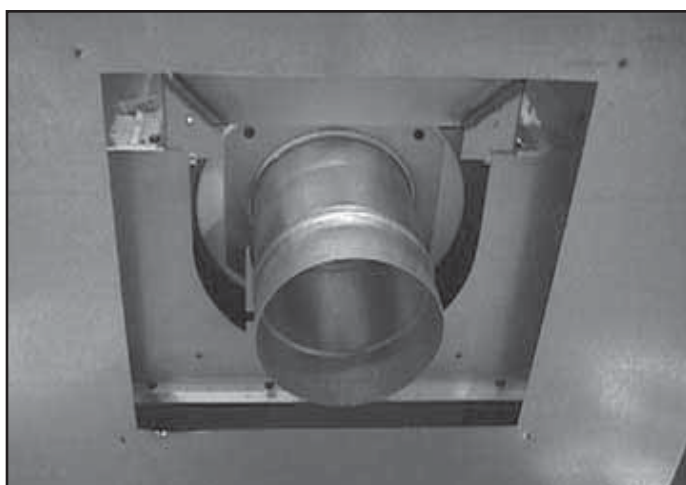
**Figure 9.8 Outer Cover, Rear - Remove Plate**

- Remove four screws holding inner cover plate to appliance back. See Figure 9.9. Remove inner cover.



**Figure 9.9 Remove Inner Cover Plate**

- Place inner collar on appliance back and replace four screws to hold this collar in place. See Figure 9.10. Make sure insulation is attached to the collar base!



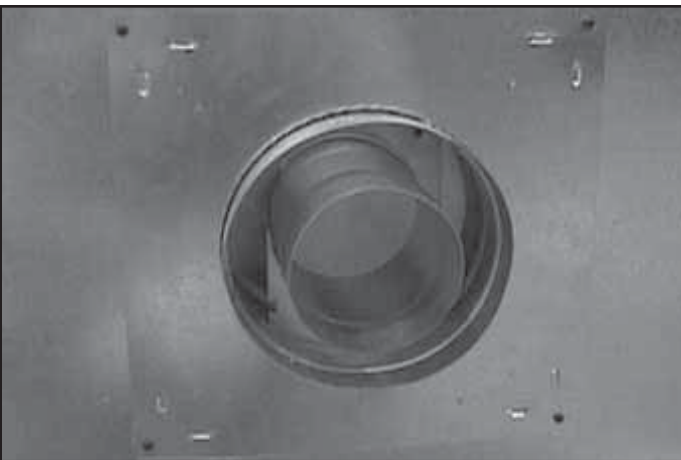
**Figure 9.10 Place inner collar on Rear of Appliance**

- Place outer collar on rear of appliance and replace four screws to hold collar in place. See Figure 9.11. Make sure insulation is attached to the collar base!



**Figure 9.11 Place Outer Collar on Rear of Appliance**

- Locate the cover plate removed in the second step. Place plate around rear vented collars and replace four screws to hold plate in place. See Figure 9.12.



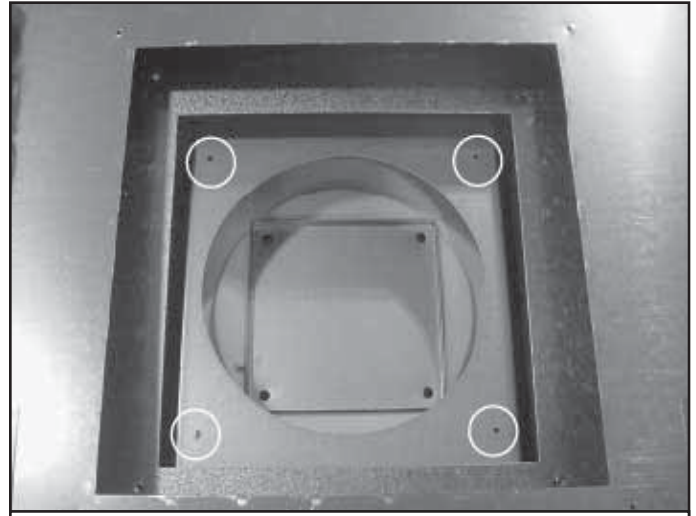
**Figure 9.12 Cover Plate Placed on Rear of Appliance**

- Place the white insulation with the slot around the outer collar. See Figure 9.13.



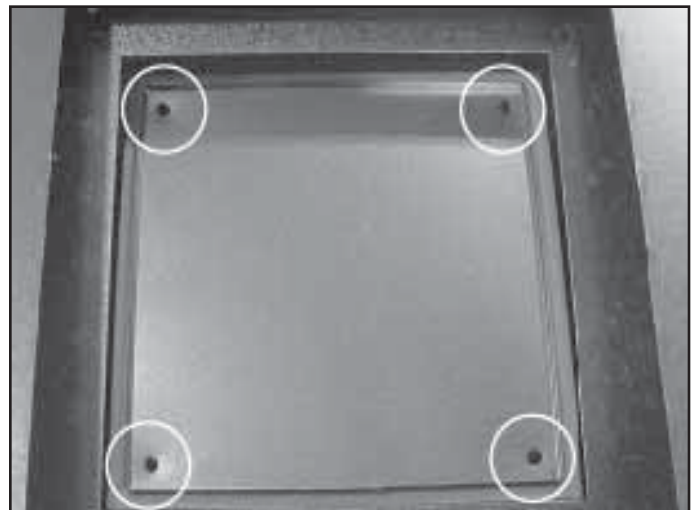
**Figure 9.13 Place Insulation over the Cover Plate**

- Place inner cover plate on appliance top and replace four screws to hold inner cover plate in place. See Figure 9.14. Make sure gasket is replaced with the cover plate!



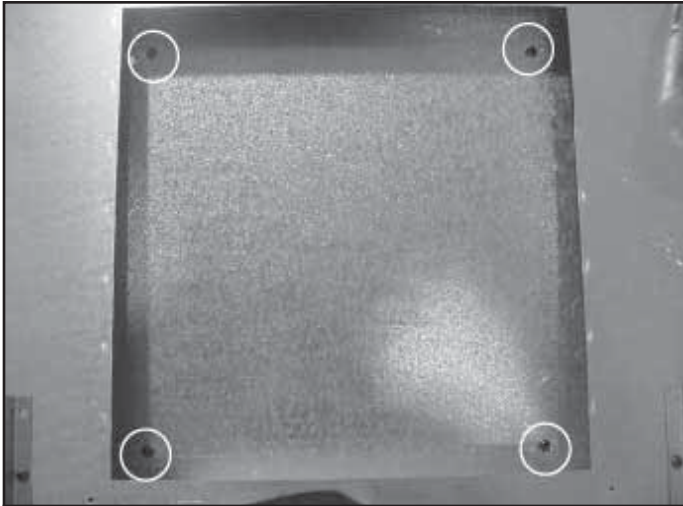
**Figure 9.14 Inner Cover-Top**

- Place outer cover plate on appliance top and replace four screws to hold outer cover plate in place. See Figure 9.15. Make sure insulation is replaced with cover plate!

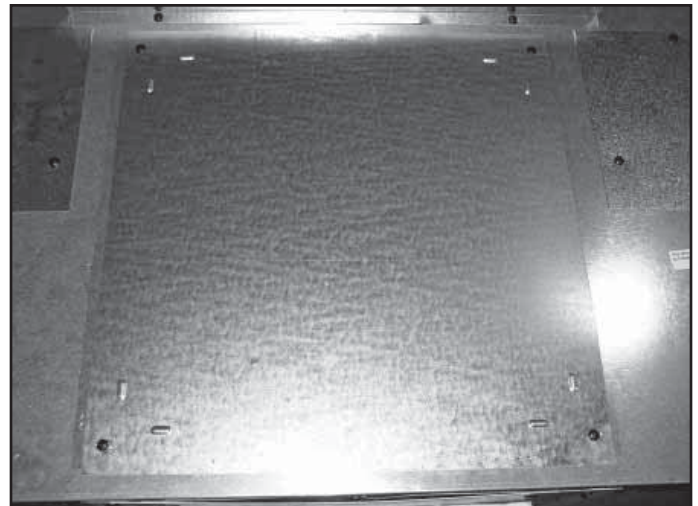


**Figure 9.15 Outer Cover-Top**

- Locate heat shield cover plate removed in the first step. Place the heat shield cover plate on top of heat shield. Replace four screws to hold this plate in place. See Figure 9.16.

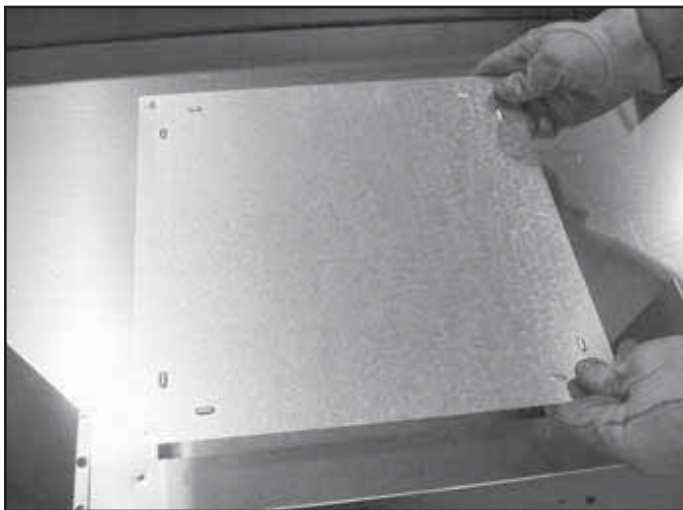


**Figure 9.16 Cover Plate-Replace**



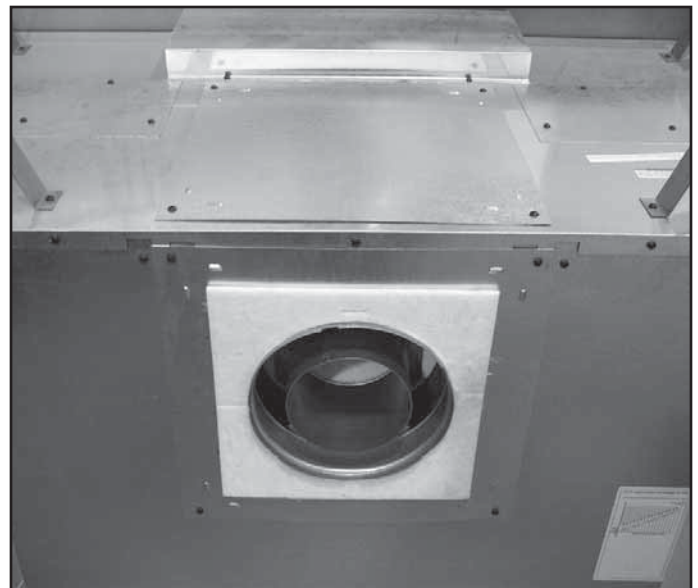
**Figure 9.18 Screw Cover into Place**

- Locate outer shell cover removed in the sixth step (Figure 9.7). Place the cover on top of appliance. See Figure 9.17. Replace four screws to hold plate in place. See Figure 9.18.



**Figure 9.17 Place Cover Plate on Top of Appliance**

- The appliance should look like the one shown in Figure 9.19 after it has been converted to a rear vent appliance.



**Figure 9.19 Completed Conversion**



## B. 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

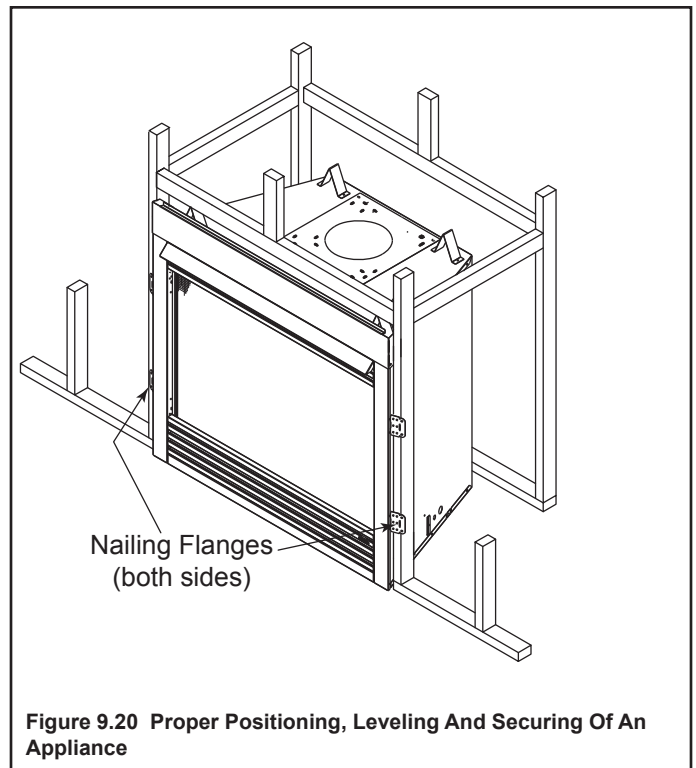
Block openings into the chase to prevent entry of blown-in insulation. Make sure insulation and other materials are secured.

**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 9.20). 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 pilot holes at the bottom of the appliance.



# 10 Install Vent Pipe

## A. Assemble Pipe Sections (DVP Only)

### Attach Pipe to the Firebox Assembly

**Note:** The end of the pipe sections with the lanced tabs will face towards the appliance.

Attach the first pipe section to the starting collar:

- Lanced pipe end to the starting collar
- Inner pipe over inner collar
- Push the pipe section until all lanced tabs snap in place
- Lightly tug on pipe to confirm it has locked.

### Commercial, Multi-family (Multi-level exceeding two stories), or High-Rise Applications

All outer pipe joints must be sealed with high temperature silicone, including the slip section that connects directly to the horizontal termination cap.

- Apply a bead of silicone sealant inside the female outer pipe joint prior to joining sections. See Figure 10.1
- Only outer pipes need to be sealed. All unit collar, pipe, slip section, elbow and cap outer flues shall be sealed in this manner, unless otherwise stated.

**WARNING! Risk of Fire or Explosion! DO NOT break silicone seals on slip sections. Use care when removing termination cap from slip pipe. If slip section seals are broken during removal of the termination cap, vent may leak.**

### Assemble Pipe Sections

Per Figure 10.2:

- Start the inner pipe on the lanced end of section A into the flared end of section B.
- Start the outer pipe of section A over the outer pipe of section B.
- Once both vents sections are started, push firmly until all lanced tabs lock into place.
- Lightly tug on the pipe to confirm the tabs have locked.

It is acceptable to use screws no longer than 1/2 in. (13 mm) to hold outer pipe sections together. If predrilling holes, **DO NOT** penetrate inner pipe.

For 90° and 45° elbows that are changing the vent direction from horizontal to vertical, one screw minimum should be put in the outer flue at the horizontal elbow joint to prevent the elbow from rotating. Use screws no longer than 1/2 in. (13 mm). If predrilling screw holes, **DO NOT** penetrate inner pipe.

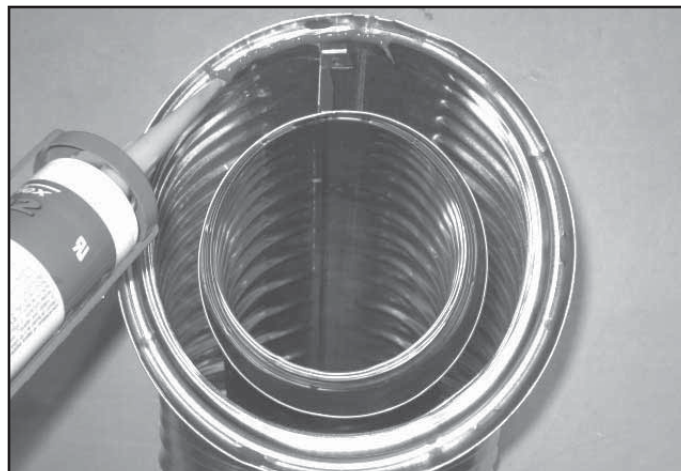


Figure 10.1 High Temperature Silicone Sealant

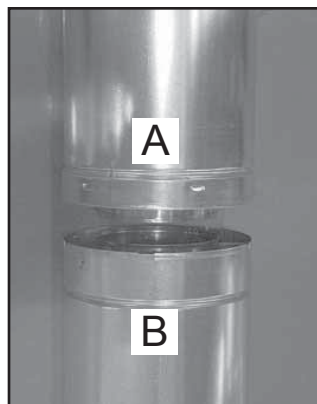


Figure 10.2

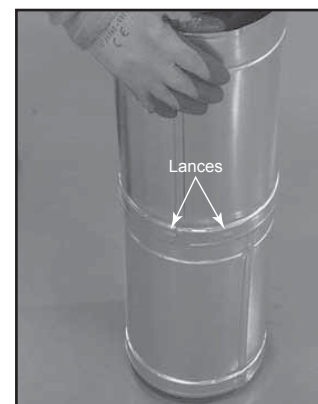
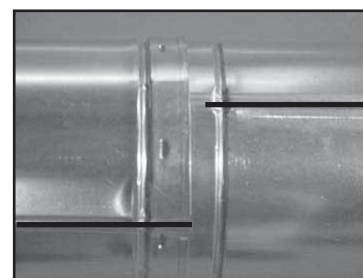
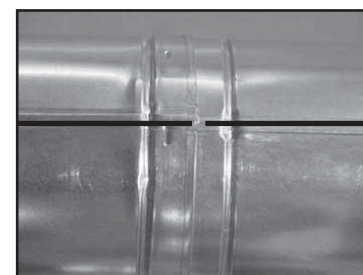


Figure 10.3

**Note:** Make sure that the seams are not aligned to prevent unintentional disconnection.



CORRECT



INCORRECT

Figure 10.4 Seams

## B. Assemble Vent Sections (SLP Only)

To attach the first vent component to the starting collars of the appliance

- Attach an DVP-SLP24 adapter to the starting collar of the appliance.
- Lock the vent components into place by sliding the pipe section onto the collar.
- Align the seam of the pipe and seam of collar to allow engagement. Rotate the vent component to lock into place. Use this procedure for all vent components. See Figure 10.5.
- Slide the gasket over the first vent section and place it flush to the appliance. This will prevent cold air infiltration. High temperature caulk may be used to hold the part in place.
- Continue adding vent components, locking each succeeding component into place.
- Ensure that each succeeding vent component is securely fitted and locked into the preceding component.

### Commercial, Multi-family (Multi-level exceeding two stories), or High-Rise Applications

For installation into a commercial, multi-family (multi-level exceeding two stories) or high-rise applications: All outer pipe joints must be sealed with high temperature silicone, including the slip section that connects directly to the horizontal termination cap.

- Apply a bead of silicone sealant inside the female outer pipe joint prior to joining sections. See Figure 10.1
- Only outer pipes need to be sealed. All unit collar, pipe, slip section, elbow and cap outer flues shall be sealed in this manner, unless otherwise stated.

**WARNING! Risk of Fire or Explosion! DO NOT break silicone seals on slip sections. Use care when removing termination cap from slip pipe. If slip section seals are broken during removal of the termination cap, vent may leak.**

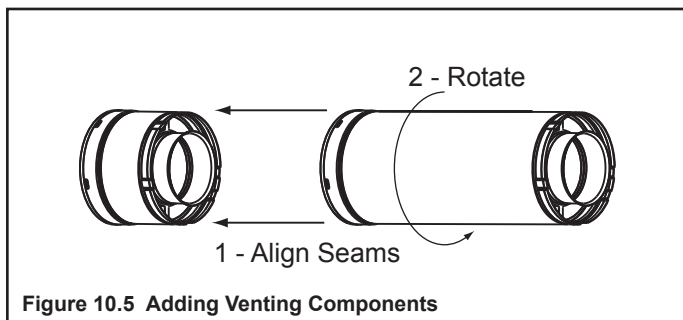


Figure 10.5 Adding Venting Components

## C. Assemble Slip Sections

**WARNING! Risk of Fire or Asphyxiation! Overlap pipe sections at least 1 1/2 in. (38 mm). Secure slip sections with two screws which must not exceed 1/2 in. (13 mm) in length. Use the pilot holes. Pipe could separate if not properly joined.**

- Slide the inner flue of the slip section into the inner flue of the pipe section and the outer flue of the slip section over the outer flue of the pipe section. See Figure 10.6.
- Slide together to the desired length.

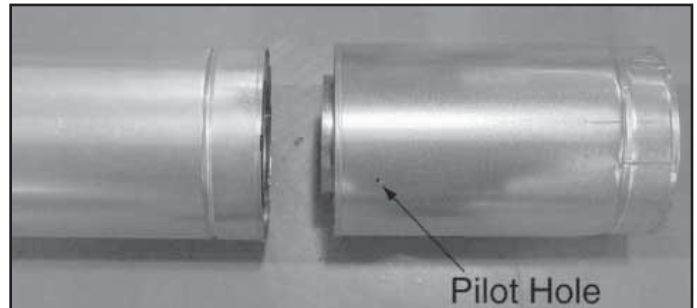


Figure 10.6 Slip Section Pilot Holes

- Maintain a 1-1/2 in. (38 mm) overlap between the slip section and the pipe section.
- Secure the pipe and slip section with two screws no longer than 1/2 in. (13 mm), using the pilot holes in the slip section. See Figure 10.7.



Figure 10.7 Screws into Slip Section

- Continue adding pipe as necessary following instructions in "Assembling Pipe Sections."

**NOTICE:** If slip section is too long, the inner and outer flues of the slip section can be cut to the desired length.

**NOTICE:** When installing a vent system with an HRC termination cap, all pipe system joints shall be sealed using a high temperature silicone sealant.

- Apply a bead of silicone sealant inside the female outer pipe joint prior to joining sections.
- Only outer pipes are sealed, sealing the inner flue is not required.
- All unit collar, pipe, slip section, elbow and cap outer flues shall be sealed.

## D. Secure the Vent Sections

- Vertical runs of DVP pipe must be supported every 8 ft. (2.44 m) after the 25 ft. (7.62 m) maximum unsupported rise.
- Vertical runs of SLP pipe must be supported every 8 ft. (2.44 m).
- Horizontal sections of vent must be supported every 5 ft. (1.52 m) with a vent support or plumber's strap.
- Wall shield firestops may be used to provide horizontal support.
- Vent support or plumber's strap (spaced 120° apart) may be used for support. See Figures 10.8 and 10.9.
- SLP ceiling firestops have tabs that may be used to provide vertical support.

**WARNING! Risk of Fire, Explosion or Asphyxiation!** Improper support may allow vent to sag and separate. Use vent run supports and connect vent sections per installation instructions. **DO NOT** allow vent to sag below connection point to appliance.

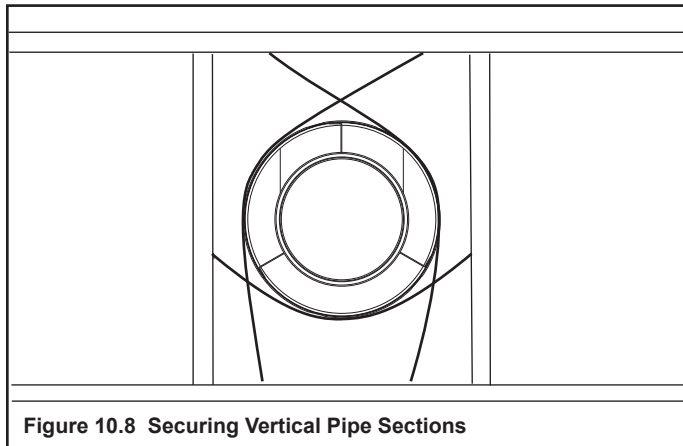


Figure 10.8 Securing Vertical Pipe Sections

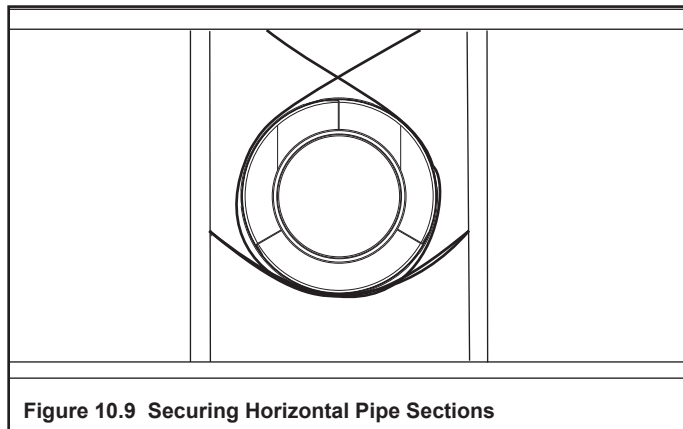


Figure 10.9 Securing Horizontal Pipe Sections

## E. Disassemble Vent Sections

- Rotate either section (see Figure 10.10) so the seams on both pipe sections are aligned as shown in Figure 10.11.
- Pull carefully to separate the pieces of pipe.

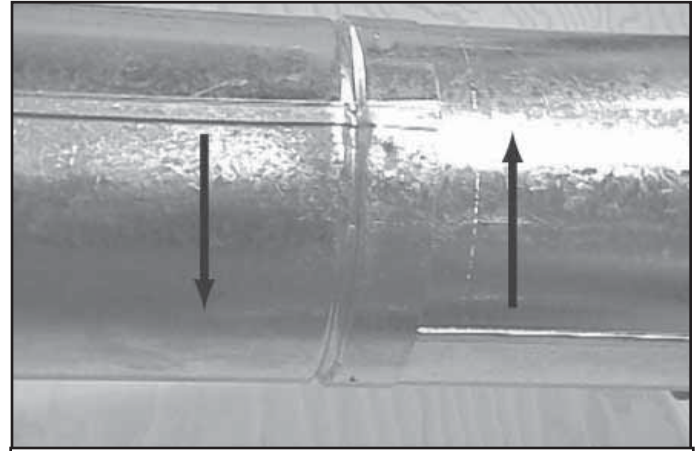


Figure 10.10 Rotate Seams for Disassembly

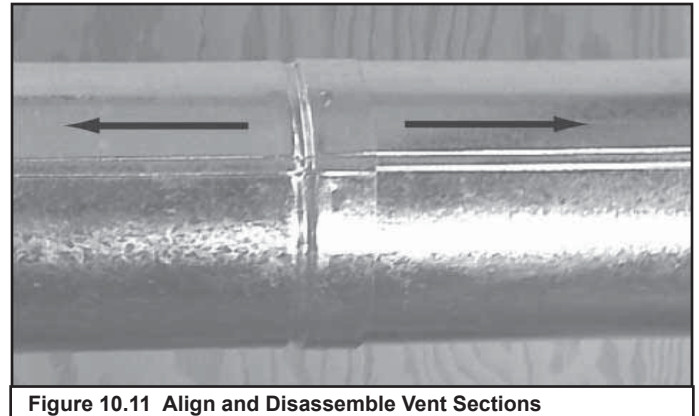


Figure 10.11 Align and Disassemble Vent Sections

## F. Install Decorative Ceiling Components (SLP only)

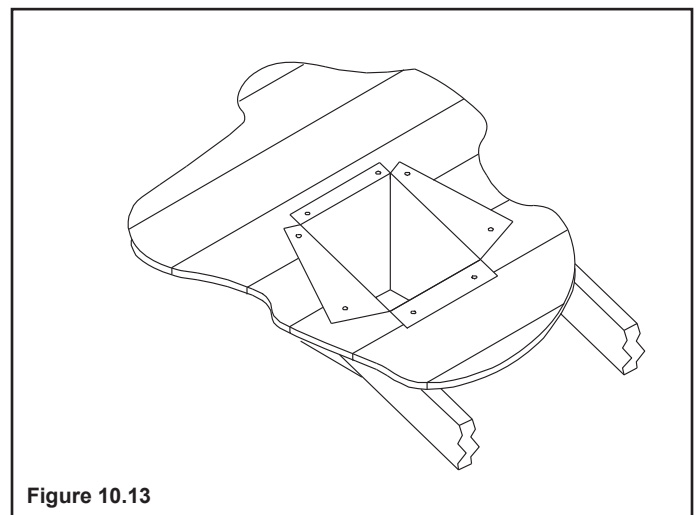
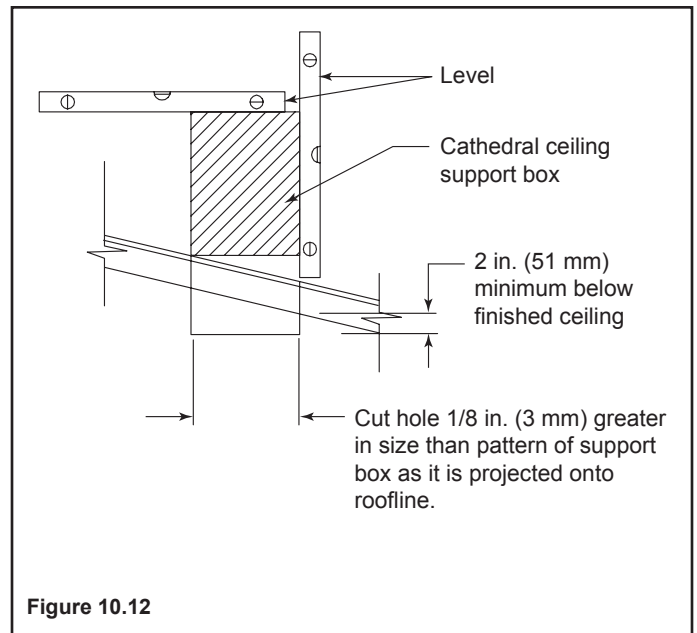
A decorative ceiling thimble can be installed on a flat ceiling through which the vent passes. The decorative ceiling thimble is used to cover the firestop, which is installed according to section 8.C.

- Seal the gap between the vent pipe and firestop using high temperature silicone to prevent cold air infiltration.
- Install the decorative ceiling thimble by sliding it up to the ceiling and attaching it using the provided screws.

A decorative cathedral ceiling support box can be used where vertical vent runs pass through a cathedral ceiling.

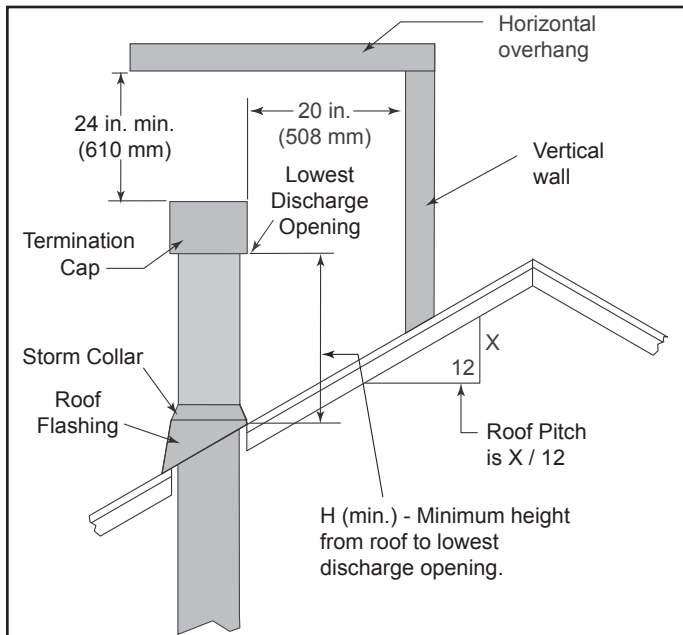
- Use a plumb-bob to mark the center line of the venting system on the ceiling and drill a small hole through the ceiling and roof at this point. Locate the hole and mark the outline of the cathedral ceiling support box on the outside roof.
- Remove shingles or other roof covering as necessary to cut the rectangular hole for the support box. Cut the hole 1/8 in. (3 mm) larger than the support box outline.
- Lower the support box through the hole in the roof until its bottom is at least 2 in. (51 mm) below the ceiling (Figure 10.12).
- Level the support box both vertically and horizontally and temporarily tack it in place through the inside walls into the roof sheathing.
- Use tin snips to cut the support box from the top corners down to the roof line and fold the resulting flaps to the roof. See Figure 10.13.
- Nail the flaps to the roof AFTER running a bead of non hardening sealant between the flaps and the roof.

**WARNING! Risk of Fire!** Clean out ALL materials from inside the support box and complete the vertical vent run and termination.



## G. Install Metal Roof Flashing

- See minimum vent heights for various pitched roofs (Figure 10.14) to determine the length of pipe to extend through the roof.
- Slide the roof flashing over the pipe sections extending through the roof as shown in Figure 10.15.



Roof Pitch	H (Min.) Ft.	Roof Pitch	H (Min.) Ft.
Flat to 6/12	1.0*	Over 11/12 to 12/12	4.0
Over 6/12 to 7/12	1.25*	Over 12/12 to 14/12	5.0
Over 7/12 to 8/12	1.5*	Over 14/12 to 16/12	6.0
Over 8/12 to 9/12	2.0*	Over 16/12 to 18/12	7.0
Over 9/12 to 10/12	2.5	Over 18/12 to 20/12	7.5
Over 10/12 to 11/12	3.25	Over 20/12 to 21/12	8.0

\* 3 ft. minimum in snow regions

Figure 10.14 Minimum Height From Roof To Lowest Discharge Opening

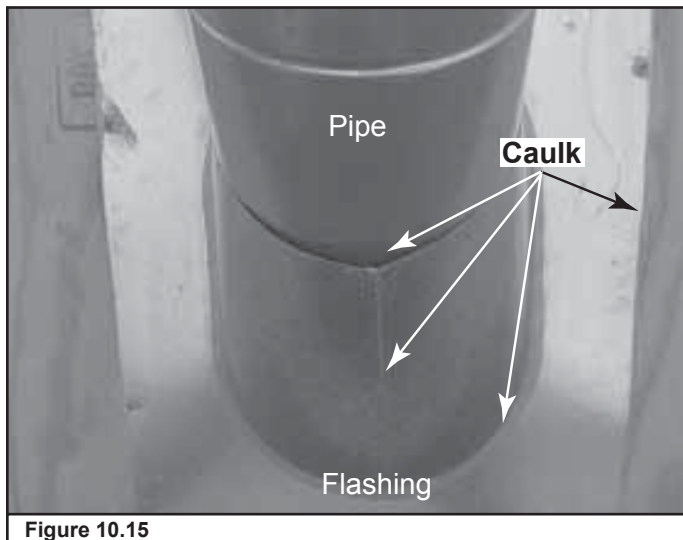


Figure 10.15

**NOTICE:** Failure to properly caulk the roof flashing could cause water entry.

- Caulk the gap between the roof flashing and the outside diameter of the pipe.
- Caulk the perimeter of the flashing where it contacts the roof surface. See Figure 10.15.

## H. Assemble and Install Storm Collar

**CAUTION! Risk of Cuts, Abrasions or Flying Debris.** Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.

- Connect both halves of the storm collar with two screws (see Figure 10.16).
- Wrap the storm collar around the exposed pipe section closest to the roof and align brackets. Insert a bolt (provided) through the brackets and tighten the nut to complete the storm collar assembly. Make sure the collar is tight against the pipe section.
- Slide the assembled storm collar down the pipe section until it rests on the roof flashing (see Figure 10.17).
- Caulk around the top of the storm collar (see Figure 10.23).

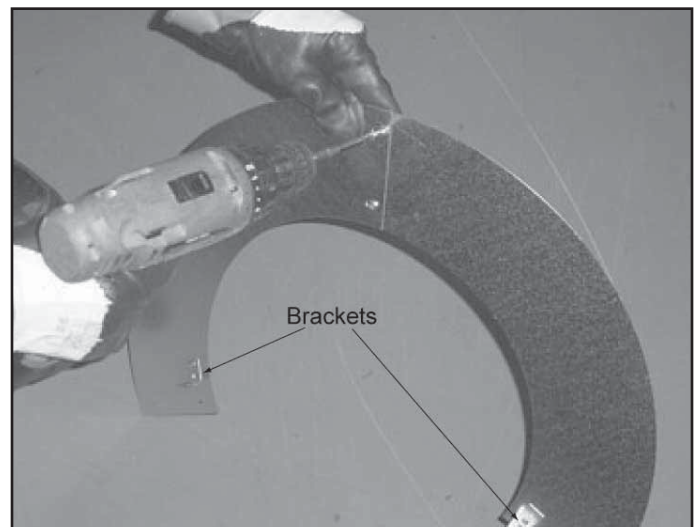


Figure 10.16 Assembling the Storm Collar



Figure 10.17 Assembling the Storm Collar Around the Pipe

## I. Install Vertical Termination Cap

- Attach the vertical termination cap by sliding the inner collar of the cap into the inner flue of the pipe section while placing the outer collar of the cap over the outer flue of the pipe section.
- Secure the cap by driving three self-tapping screws (supplied) through the pilot holes in the outer collar of the cap into the outer flue of the pipe (see Figure 10.23).

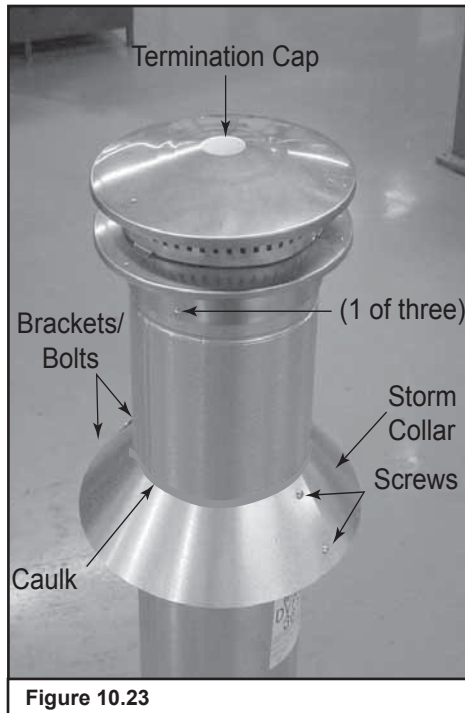


Figure 10.23

## J. Install Decorative Wall Components (SLP only)

A decorative wall thimble can be installed on an interior wall through which the vent passes. The decorative wall thimble is used to cover the wall shield firestop.

- Slide the decorative wall thimble over the last section of horizontal pipe before passing through the wall to the outside.
- Once the pipe section and the termination cap have been connected, slide the wall thimble up to the interior wall surface and attach with screws provided. See Figure 10.24.

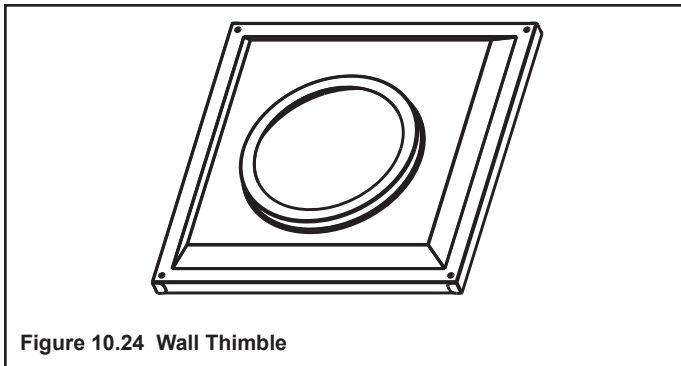


Figure 10.24 Wall Thimble

## K. Heat Shield Requirements for Horizontal Termination

**WARNING! Risk of Fire!** To prevent overheating and fire, heat shields must extend through the entire wall thickness.

- **DO NOT** remove the heat shields attached to the wall shield firestop and the horizontal termination cap (shown in Figure 10.26).
- Heat shields must overlap 1-1/2 in. (38 mm) minimum.

There are two sections of the heat shield. One section is factory-attached to the wall shield firestop. The other section is factory-attached to the cap. See Figure 10.25.

If the wall thickness does not allow the required 1-1/2 in. (38 mm) heat shield overlap when installed, an extended heat shield must be used.

- If the wall thickness is less than 4 in./102 mm (DVP) or 4-3/8 in./ 111 mm (SLP), the heat shields on the cap and wall shield firestop must be trimmed. A minimum 1-1/2 in. (38 mm) overlap **MUST** be maintained.
- Use an extended heat shield if the finished wall thickness is greater than 7-1/4 in. (184 mm).
- The extended heat shield may need to be cut to length maintaining sufficient length for a 1-1/2 in. (38 mm) overlap between heat shields.
- Attach the extended heat shield to either of the existing heat shields using the screws supplied with the extended heat shield. Refer to "Vent Components Diagrams" in the back of this manual.
- Rest the small leg on the extended heat shield on top of the pipe section to properly space it from the pipe section.

**Important Notice:** Heat shields may not be field constructed.

## L. Install Horizontal Termination Cap

**WARNING! Risk of Fire!** The telescoping flue section of the termination cap **MUST** be used when connecting vent.

- 1-1/2 (38 mm) minimum overlap of flue telescoping section is required.

Failure to maintain overlap may cause overheating and fire.

- Vent termination must not be recessed in the wall. Siding may be brought to the edge of the cap base.
- Flash and seal as appropriate for siding material at outside edges of cap.

- When installing a horizontal termination cap, follow the cap location guidelines as prescribed by current **ANSI Z223.1** and **CAN/CGA-B149** installation codes and refer to Section 6 of this manual.

**CAUTION! Risk of Burns!** Local codes may require installation of a cap shield to prevent anything or anyone from touching the hot cap.

**NOTICE:** For certain exposures which require superior resistance to wind-driven rain penetration, a flashing kit and HRC caps are available. When penetrating a brick wall, a brick extension kit is available for framing the brick.

**Note:** When using termination caps with factory-supplied heat shield attached, no additional wall shield firestop is required on the exterior side of a combustible wall.

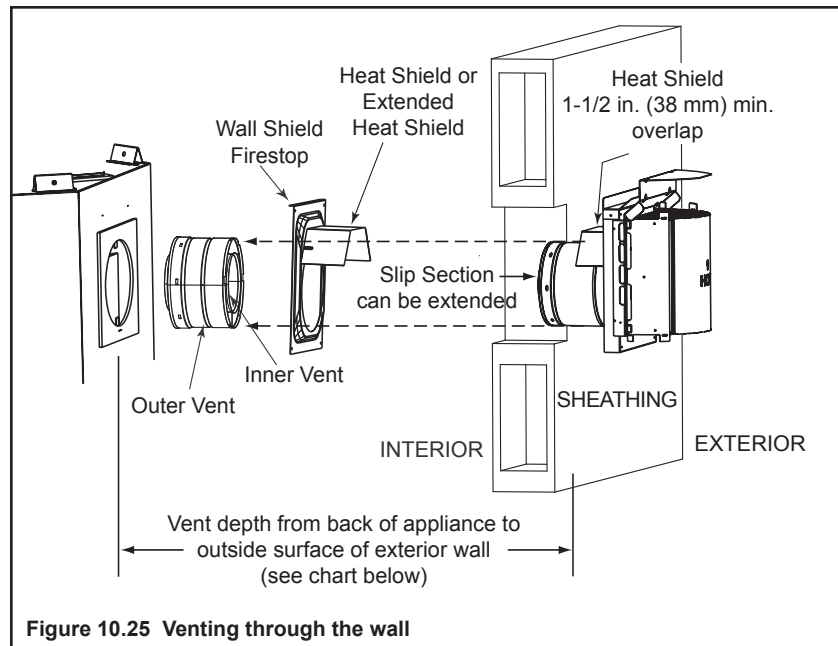


Figure 10.25 Venting through the wall

Cap Specification Chart (depth without using additional pipe sections)

CD-M Series	DVP-TRAPK1 Top Vent Depth	DVP-TRAP1 Rear Vent Depth	DVP-TRAPK2 Top Vent Depth	DVP-TRAP2 Rear Vent Depth	SLP-TRAP1 Top Vent Depth	SLP-TRAP2 Top Vent Depth
		4 1/8 to 6 in.	3 5/8 to 5 1/2 in.	6 1/2 to 10 1/2 in.	7 to 11 in.	1 5/8 to 4 1/2 in.
	DVP-HPC1 Top Vent Depth	DVP-HPC1 Rear Vent Depth	DVP-HPC2 Top Vent Depth	DVP-HPC2 Rear Vent Depth		
	4 1/8 to 6 1/4 in.	3 5/8 to 5 3/4 in.	6 1/4 to 10 3/8 in.	5 3/4 to 9 7/8 in.		

DVP-TRAP1 can adjust 1 1/2 in. (3 1/8 to 4 5/8)

DVP-TRAP2 can adjust 4 in. (5 3/8 to 9 3/8)

SLP-TRAP1 can adjust 1 5/8 in. (3 1/8 to 4 3/4)

SLP-TRAP2 can adjust 4 in. (5 1/4 to 9 1/4)

DVP-HPC1 can adjust 2 1/8 in. (4 1/4 to 6 3/8)

DVP-HPC2 can adjust 4 1/8 in. (6 3/8 to 10 1/2)



# 11 Shrouds

## A. HHT Shrouds

- You may install a shroud with this fireplace. See Section 17.D. for a list of UL Listed shrouds. Follow the instructions included with these optional components

## B. Field Constructed Shrouds

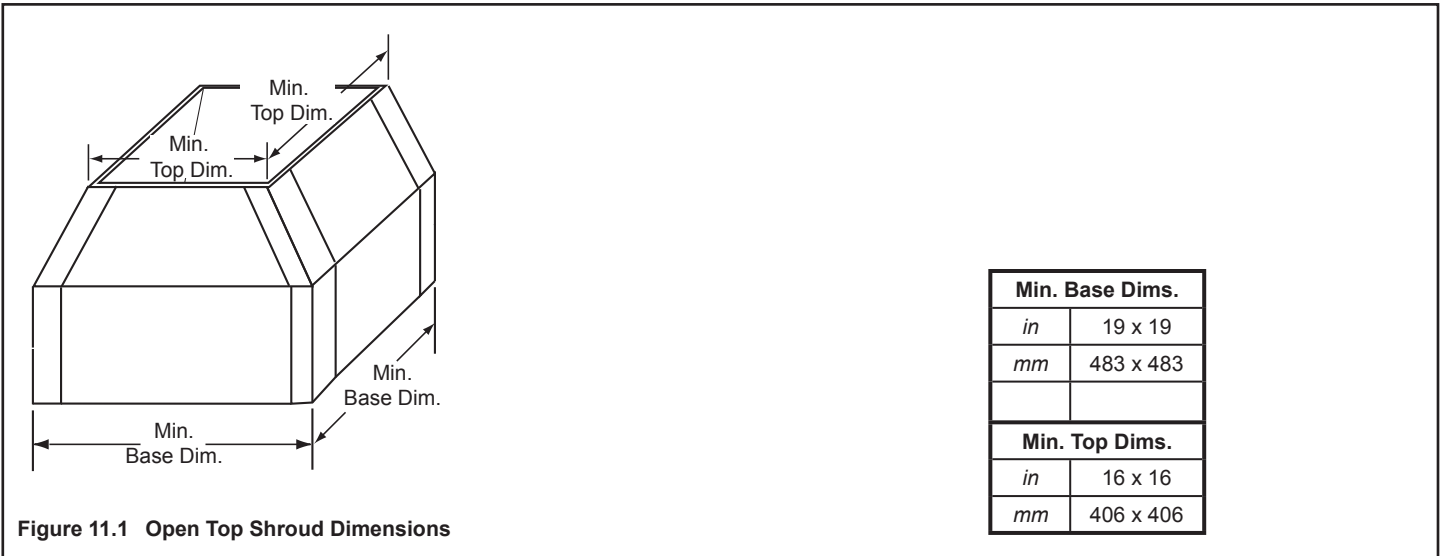
**WARNING! Risk of Fire!** Shrouds must be constructed as specified. Improper construction may overheat chase top.

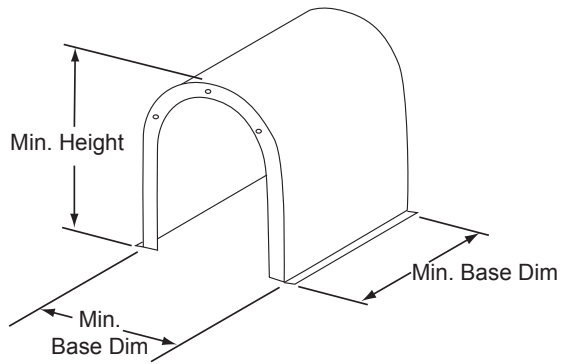
- Chase top shrouds may be field constructed where permitted by regional building codes.

**NOTICE:** Some regional codes require an agency-Listed shroud. Consult your local building officials.

- The following field constructed shroud designs have been tested for Hearth Technologies fireplace systems and termination caps.
- The shrouds must be constructed from a minimum .018 in. (26 ga) thick aluminized steel.
- The wire mesh is optional but recommended and must be .018 in. thick minimum, 1/2 in. mesh.

### Open Top Shroud (may be used with DVP-TV, DVP-TVHW, SLP-TVHW)

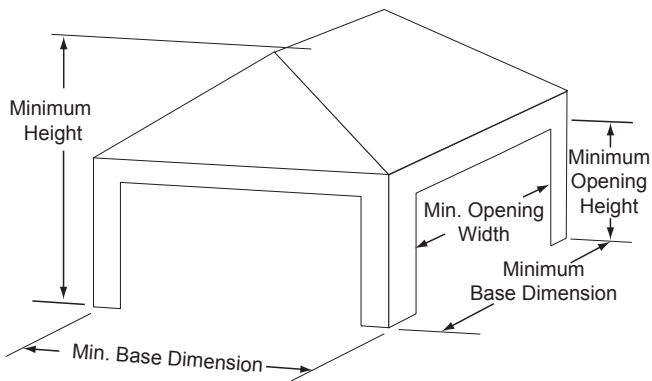




Min. Base Dims.	
<i>in</i>	20 x 20
<i>mm</i>	508 x 508
Min. Height	
<i>in</i>	18
<i>mm</i>	457

Figure 11.2 Mailbox Style Shroud Dimensions

**Roofed Style Shroud (may be used with DVP-TV, DVP-TVHW, SLP-TVHW)**



Min. Base Dims.	
<i>in</i>	20 x 20
<i>mm</i>	508 x 508
Min. Height	
<i>in</i>	18
<i>mm</i>	458
Min. Opening Width	
<i>in</i>	14
<i>mm</i>	356
Min. Opening Height	
<i>in</i>	10
<i>mm</i>	254

Figure 11.2 Roofed Style Shroud Dimensions

# 12 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	10.0 in. w.c.	13.0 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 17.A. for location of gas line access in appliance.
- Gas line may be run through knockout(s) provided.
- 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.

# 13 Electrical Information

## A. Wiring Requirements

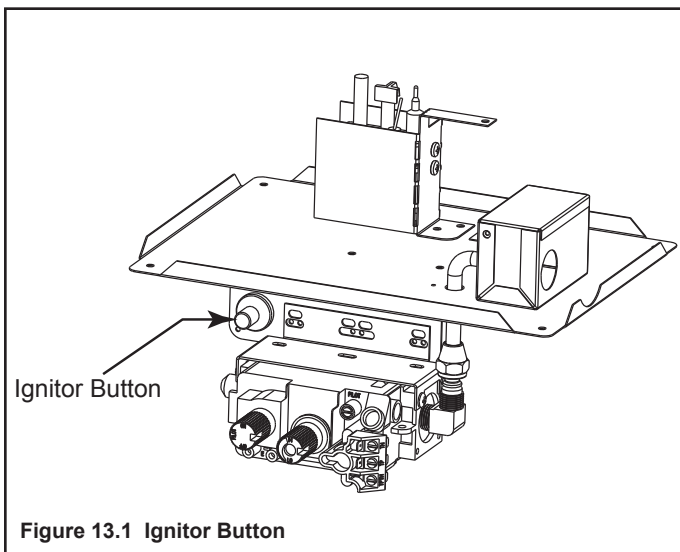
**NOTICE:** This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with **National Electric Code ANSI/NFPA 70-latest edition or the Canadian Electric Code CSA C22.1.**

- 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.**

Determine if the appliance uses an Intellifire ignition system or standing pilot ignition system:

- Open the control access panel.
- A red or black ignitor button (as shown in Figure 13.1) indicates this appliance is standing pilot ignition.



## B. Standing Pilot Ignition System Wiring

- The standing pilot ignition system wiring does not require a 110 VAC supply to operate.
- A 110 VAC junction box **MUST** be installed for use with a fan or remote control. See Figure 13.2 for junction box wiring. Keep wire lengths short as possible.

**NOTICE: DO NOT wire 110 VAC to the millivolt valve! This will damage the valve.**

- If using a thermostat use one compatible with a millivolt gas valve system:
  - Install the thermostat in the location as indicated in the 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.

## C. 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 13.3, 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.

## D. Optional Accessories Requirements

- This appliance may be used with a fan, 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.

## E. 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.

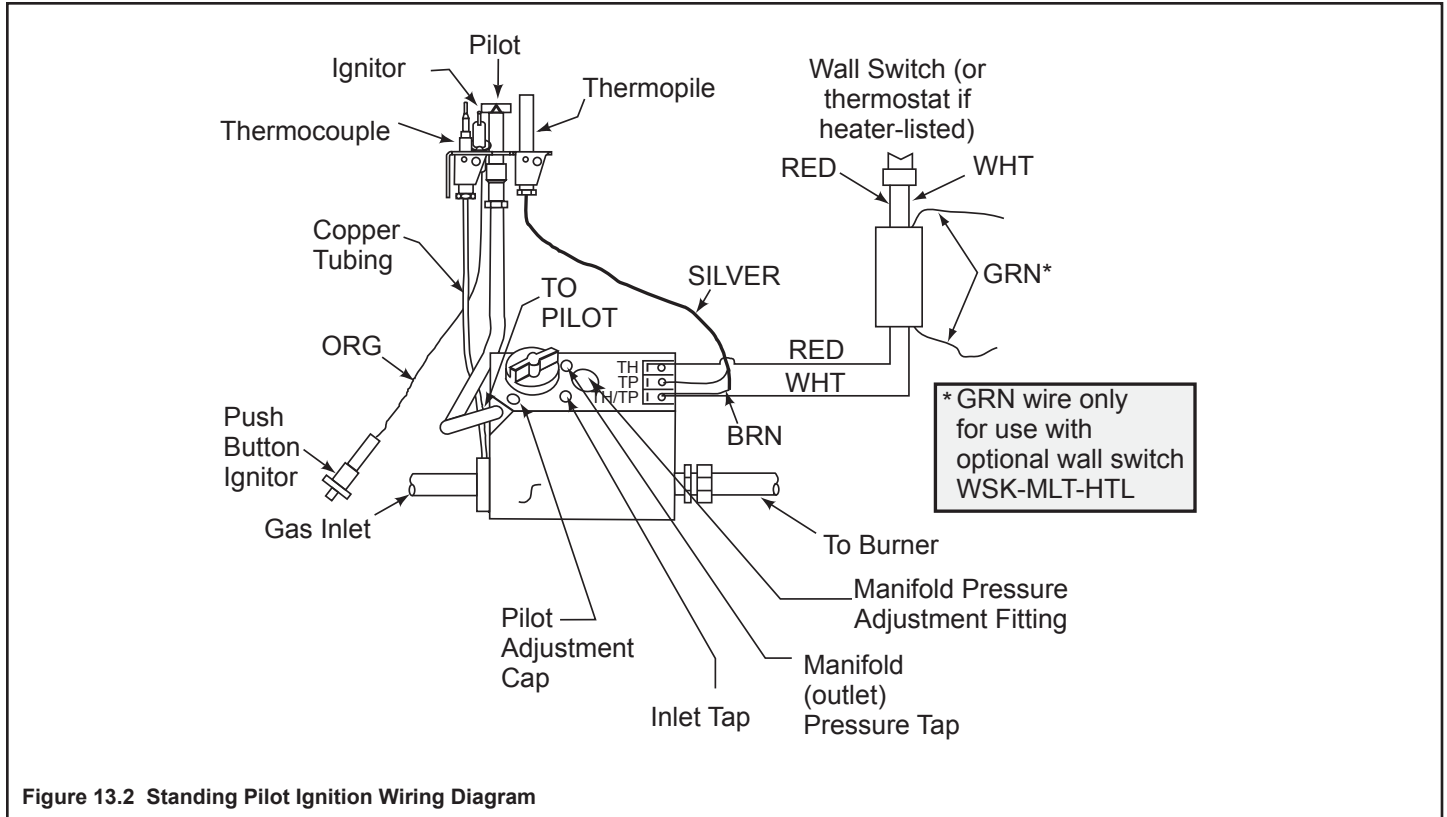


Figure 13.2 Standing Pilot Ignition Wiring Diagram

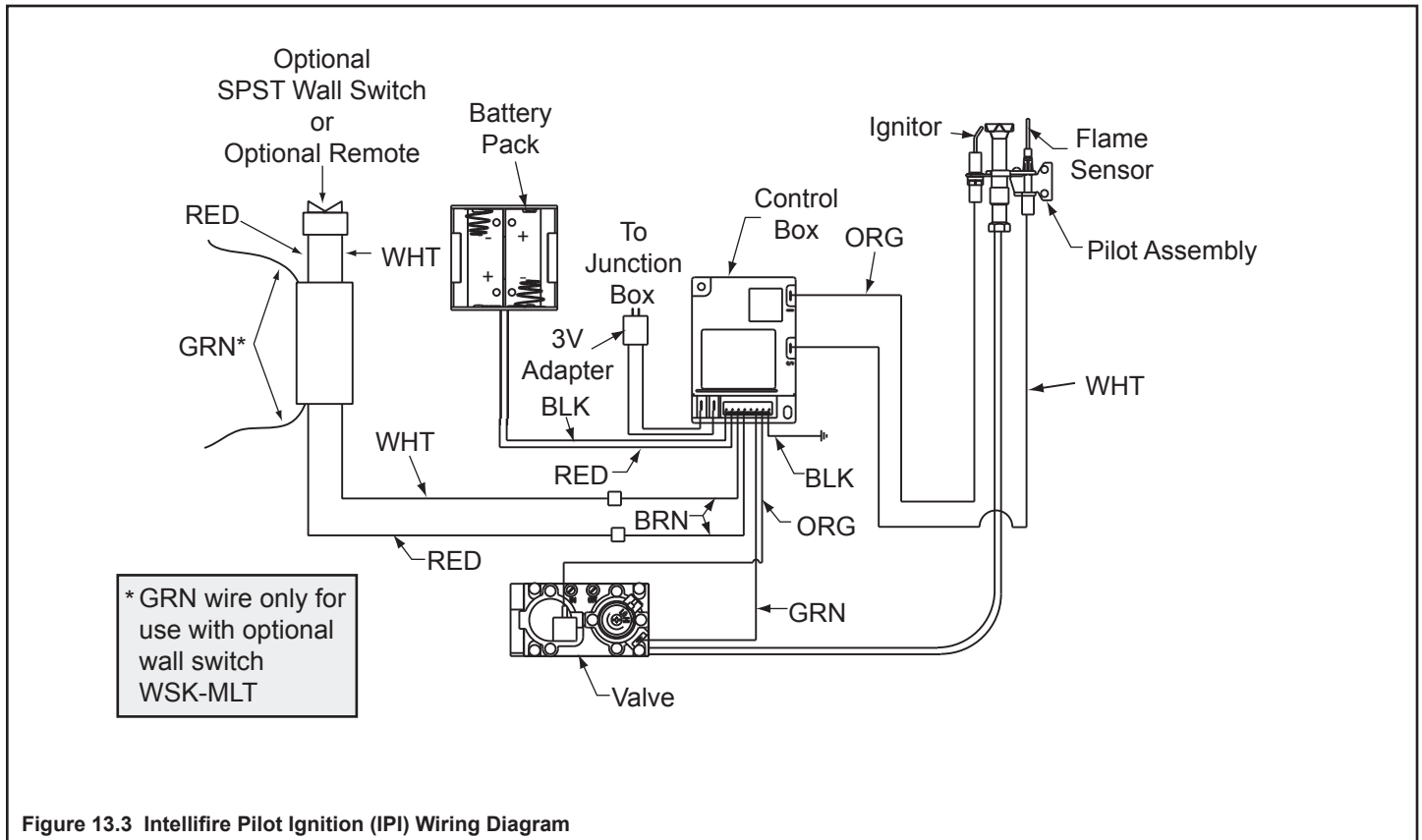


Figure 13.3 Intellifire Pilot Ignition (IPI) Wiring Diagram

## F. 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 13.4).
- 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 (see Figure 13.4).
- Pull the electrical wires from outside the appliance through this opening into the valve compartment. See Figure 13.4.
- Feed the necessary length of wire through the connector.
- Make all necessary wire connections to the junction box/receptacle and reassemble the junction box/receptacle to the outer shell.

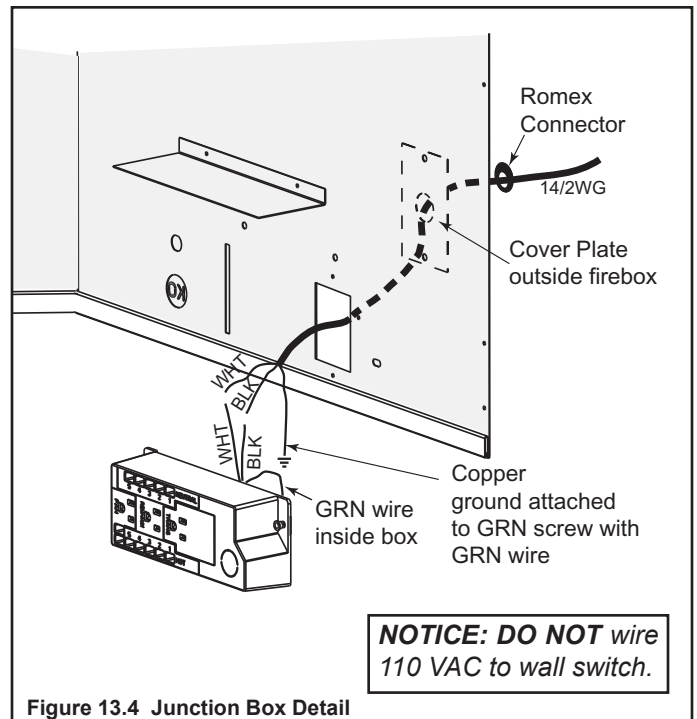


Figure 13.4 Junction Box Detail

## G. Wall Switch Installation for Fan (Optional)

If the box is being wired to a wall mounted switch for use with a fan (See Figure 13.5):

- 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.

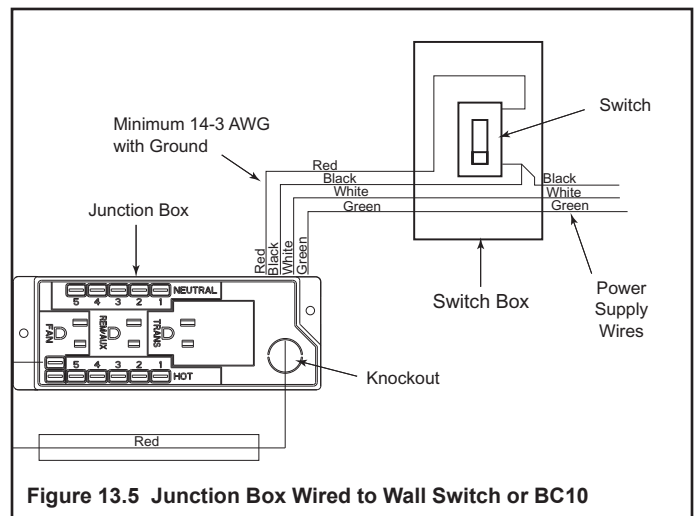


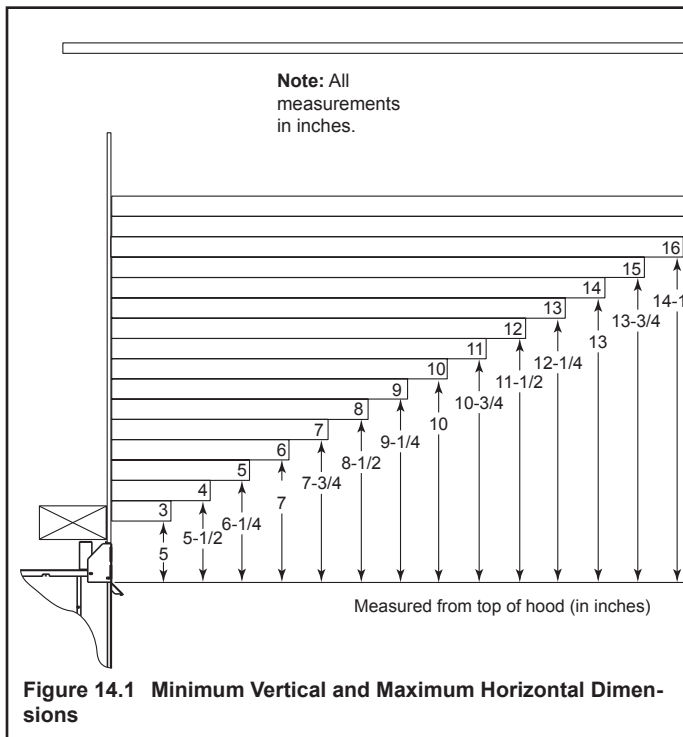
Figure 13.5 Junction Box Wired to Wall Switch or BC10

# 14 Finishing

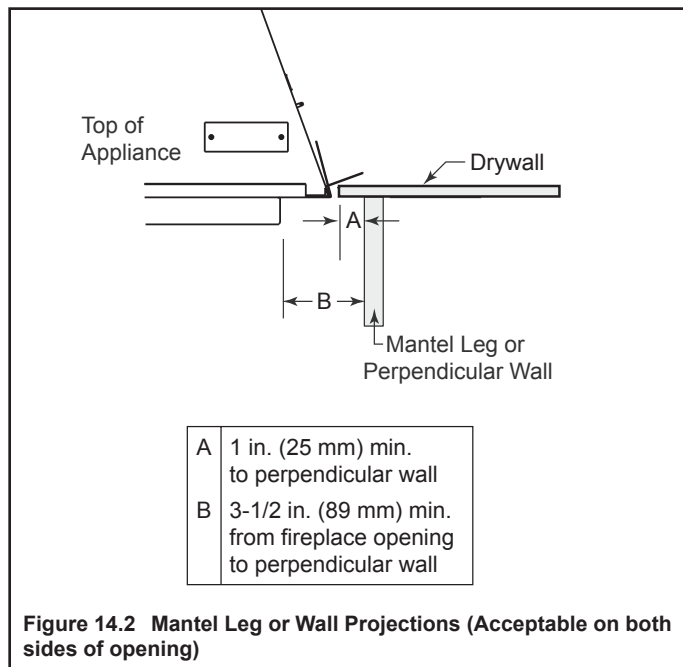
## A. Mantel and Wall Projections

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

### Mantels



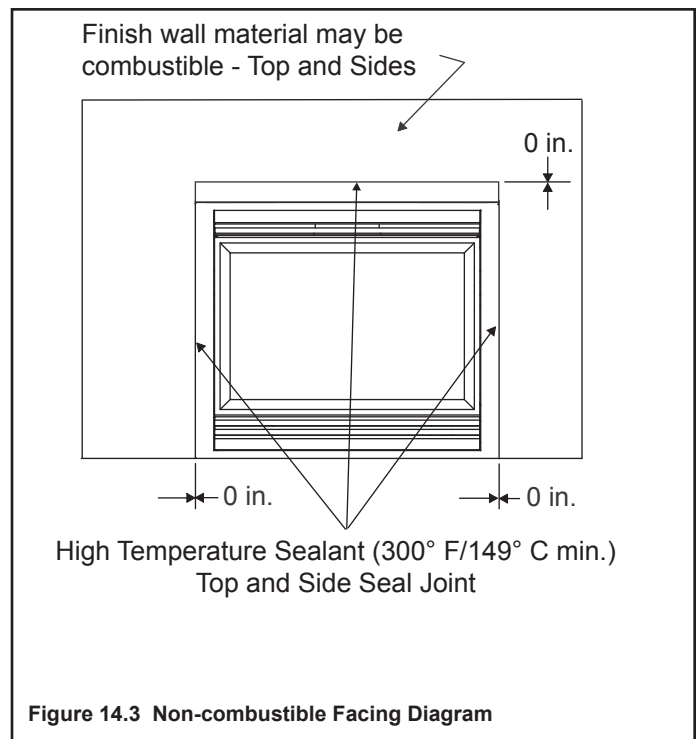
### Combustible



## 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 14.3.

**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.



# 15 Appliance Setup

## A. Remove Fixed Glass Assembly

See Section 15.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. Place the Lava Rock

- See diagram, Figure 15.1.

## F. Place the Vermiculite

- Sprinkle vermiculite over lava rock. See diagram, Figure 15.1.

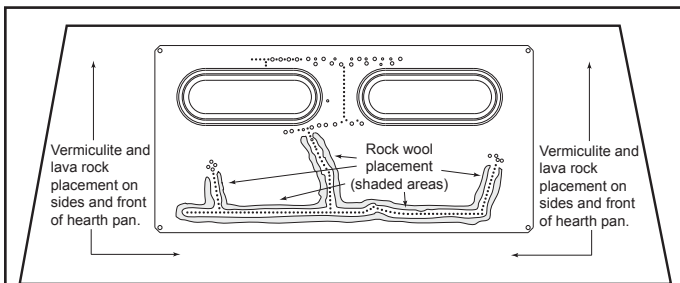


Figure 15.1 Placement of Rockwool, Lava Rock, Vermiculite

## 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 (dime0-size) rockwool on the burner pan so that rockwool touches but does not cover the holes in the burner pan.

## H. Install the Refractory

A weathered brick refractory is available as an optional accessory. Install the WTBC36D in the CD4236 Series appliances and the WTBC42D in the CD4842 Series appliances. Follow the installation instructions provided with the specific accessory part.

## I. Install the Log Assembly

- Base logs have been permanently mounted on the grate assembly and should not be moved. See Figure 15.2.



Figure 15.2 Base Logs

- Install "Y" log on left hand side of grate using locating pins to position. See Figure 15.3.



Figure 15.3 Placing Left Top Log

- Install right top log as shown in Figure 15.4 using locating pins to position log properly.

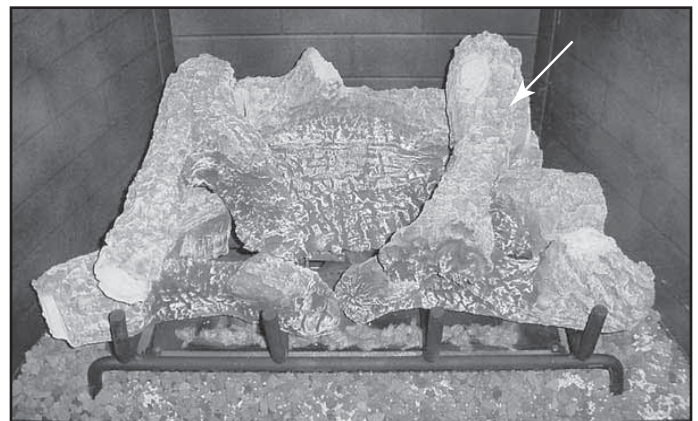


Figure 15.4 Placing Right Top Log



## J. Fixed 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.

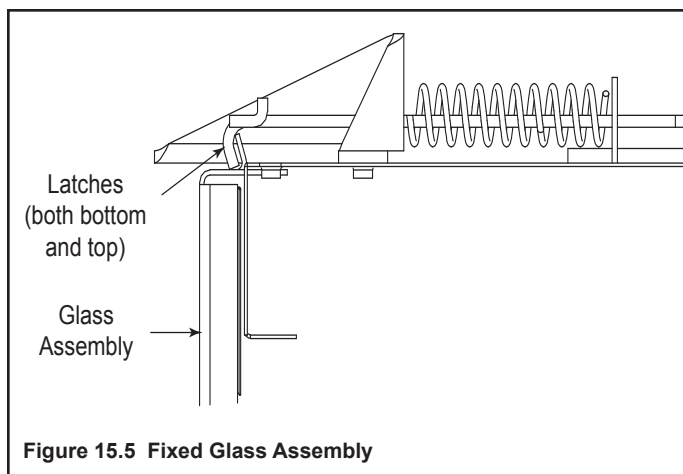
- **DO NOT** strike, slam or scratch glass.
- **DO NOT** operate fireplace with glass removed, cracked, broken or scratched.
- Replace as a complete assembly.

### Removing Fixed Glass Assembly

- Lift and pull upper grille towards you to expose two (36 in. model) or three (42 in. model) Quick Access Latches.
- Open the control access panel to expose two (36 in. model) or three (42 in. model) Quick Access Latches.
- Rotate bottom of screen assembly away from appliance and lower out of top retainers.
- Release top and bottom access latches and rotate top of the glass assembly away from top of appliance.
- Place the glass assembly on a surface that will not scratch the surface of glass assembly.

### Replacing Fixed Glass Assembly

- Replace the glass assembly on lower access latches and rotate upper portion of glass assembly into place.
- Engage top access latches.
- Engage lower access latches.
- Reinstall top corners of screen assembly in their retainer clips and rotate screen assembly to rest on lower latches.
- Close access panel and reinstall upper grille.



## K. Install Trim and/or Surround

- 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.
- Do not obstruct or modify the air inlet/outlet louvers.
- Allow space to lower and remove bottom louver/access panel.

## L. Install Hood

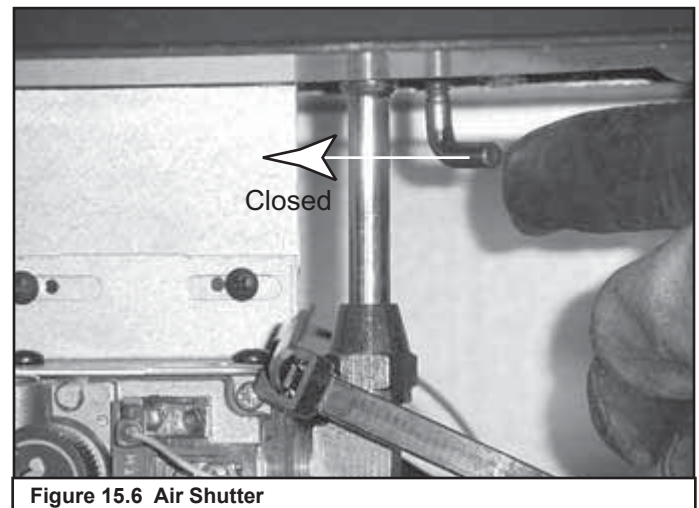
- Align back edge of hood with attachment clips and press firmly into place.

## M. 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. See Figure 15.6.

- 16 full turns of the shutter adjustment handle are required to move air shutter from fully open to fully closed.
- When the 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.



# 16 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. Standing Pilot Ignition System

Symptom	Possible Causes	Corrective Action
1. After repeated triggering of the red or black piezo ignitor button, the spark ignitor will not light the pilot. Check for spark.	A. No gas or low gas pressure.	Check the remote shut-off valves from the appliance. Usually, there is a valve near the gas main. There can be more than one valve between the appliance and the main.
	B. No LP in tank.	Check the LP (propane) tank. You may be out of fuel.
	C. Ignitor.	Check the spark at the electrode and pilot. If no spark and electrode wire is properly connected, replace the ignitor. Verify that there is no short in electrode wire.
	D. Pilot or misaligned electrode (spark at electrode).	Using match, light the pilot. If the pilot lights, turn off the pilot and trigger the piezo ignitor button again. If the pilot lights, an improper gas/air mixture caused the bad lighting and a longer purge period is recommended. If the pilot will not light, ensure the gap at the electrode and pilot is one-eighth inch to have a strong spark. If the gap is OK, replace the pilot.
2. The pilot will not stay lit after carefully following the lighting instructions.	A. Thermocouple.	Check that the pilot flame impinges on the thermocouple. Adjust the pilot for proper flame impingement.  Ensure that the thermocouple connection at the gas valve is fully inserted and tight (hand tighten plus 1/4 turn).  Verify proper voltage output from the thermocouple to the valve. Place one millivolt meter lead wire on the thermocouple copper lead. Place the second lead wire on the solder button on the back of the valve (blue wire). Start the pilot and hold the valve knob in. The millivolt reading should read 8-16 millivolts. If millivolt reading is less than 8 millivolts, replace thermocouple.
	B. Improper gas inlet pressure.	Natural gas should be 5-7 in. w.c. LP should be 11-14 in. w.c. Verify pressure with manometer.
	C. Valve.	If the thermocouple is producing 8-16 millivolts, replace control valve.
3. The pilot is burning, there is no burner flame, the valve knob is in the ON position, and the ON/OFF switch is in the ON position.	A. On/off switch or wires defective.	Check the ON/OFF switch and wires for proper connections. Place the jumper wires across the terminals at the ON/OFF switch. If the burner comes on, replace the ON/OFF switch. If the switch is OK, place the jumper wires across the ON/OFF switch wires at the gas valve. If the burner comes on, the wires are faulty or connections are bad.
	B. Thermopile may not be generating sufficient millivoltage.	Check that the pilot flame impinges thermopile properly.  Be sure the wire connections from the thermopile at the gas valve terminals are tight and that the thermopile is fully inserted into the pilot bracket.  Check the thermopile with a millivolt meter. Take the reading at TH-TP&TP terminals of the gas valve. The meter should read 350 millivolts minimum, while holding the valve knob depressed in the pilot position, with the pilot lit, and the ON/OFF switch in the OFF position. Replace the thermopile if the reading is below the specified minimum.  With the pilot in the ON position, disconnect the thermopile leads from the valve. Take a reading at the thermopile leads. The reading should be 350 millivolts minimum. Replace the thermopile if the reading is below the minimum.

## A. Standing Pilot Ignition System (continued)

Symptom	Possible Cause	Corrective Action
3. (Continued)	C. Failed valve.	Turn the valve knob to the ON position. Place the ON/OFF switch in the ON position. Check the millivolt meter at the thermopile terminals. The millivolt meter should read greater than 125mV. If the reading is acceptable, and if the burner does not come on, replace the gas valve.
	D. Plugged burner orifice.	Check the burner orifice for stoppage. Remove stoppage.
	E. Wall switch or wires.	Check the wall switch and wires for proper connections. Place the jumper wires across the terminals at the wall switch. If the burner comes on, replace the wall switch. If the wall switch is OK, place the jumper wires across the wall switch wires at the gas valve. If the burner comes on, the wires are faulty or connections are bad.
4. Frequent pilot outage problem.	A. Pilot flame may be too high or too low, or blowing out (high pressure), causing pilot safety to drop out.	Clean thermocouple and adjust the pilot flame for proper flame impingement. Follow lighting instructions carefully.
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. Failed thermopile or thermocouple.	Replace pilot if necessary.
	F. Improper vent cap installation.	Check for proper installation and freedom from debris or blockage.
6. Glass soots.	A. Flame impingement.	Adjust the log set so that the flame does not excessively impinge on it. Refer to log instructions.
	B. Improper air shutter setting.	Refer to manual for shutter set points. Ensure that set point is correct for appliance/gas type. If unit has adjustable shutter, it may be necessary to increase shutter opening.
	C. Debris around air shutter.	Inspect the opening at the base of the burner. NO MATERIAL SHOULD BE PLACED IN THIS OPENING.
7. Flame burns blue and lifts off burner.	A. Insufficient oxygen being supplied.	Ensure that the vent cap is installed properly and free of debris. Ensure that the vent system joints are tight and have no leaks.
		Ensure that no debris has been placed at the base of, or in the area of the air holes in the center of the base pan beneath the burner.
		Ensure that the glass is tightened properly on the unit, particularly on top corners.

## B. 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 igniter 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 power supply installed incorrectly.	Verify that power supply is installed and plugged into module. Check voltage of power supply under load at spade connection on module with ON/OFF switch in ON position. Acceptable readings of a good power supply 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.
	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.

## B. Intellifire Ignition System (continued)

Symptom	Possible Cause	Corrective Action
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.
	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.

# 17 Reference Materials

## A. Appliance Dimension Diagram

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

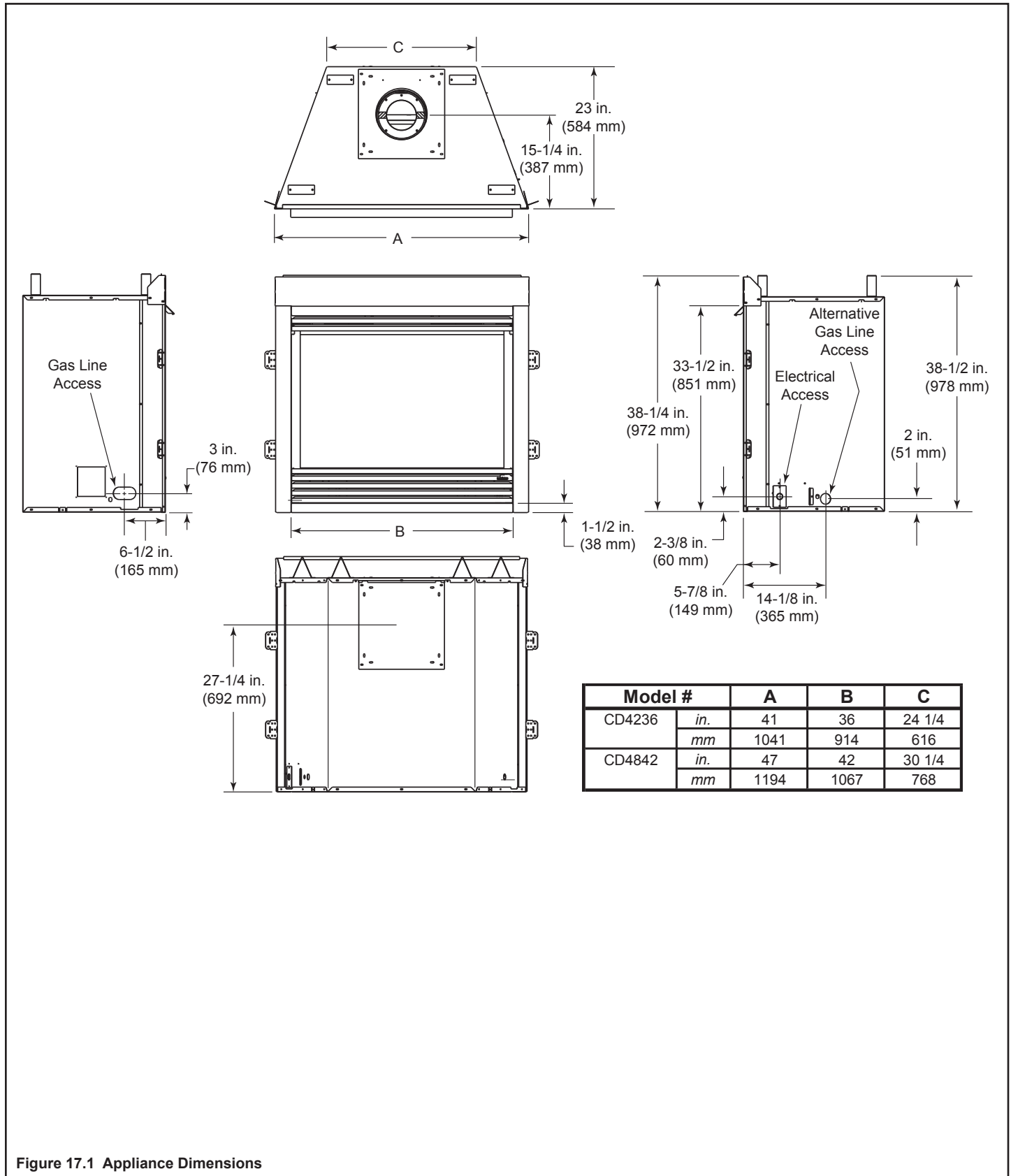
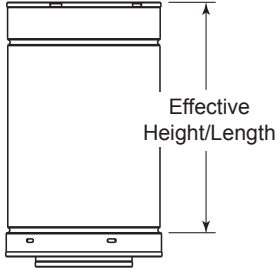


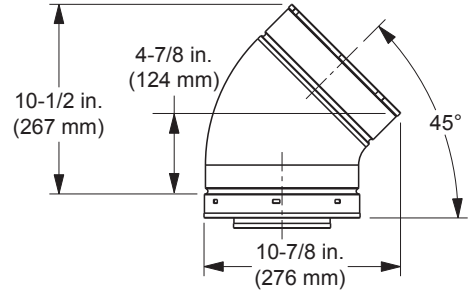
Figure 17.1 Appliance Dimensions

## B. Vent Components Diagrams

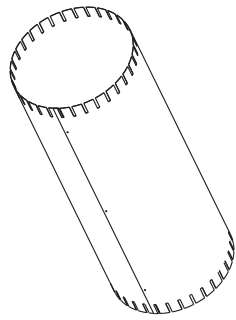


**DVP Pipe**  
(see chart)

Effective Height/Length		
Pipe	inches	mm
DVP4	4	102
DVP6	6	152
DVP12	12	305
DVP24	24	610
DVP36	36	914
DVP48	48	1219
DVP6A	3 - 6	76 - 152
DVP12A	3 - 12	76 - 305

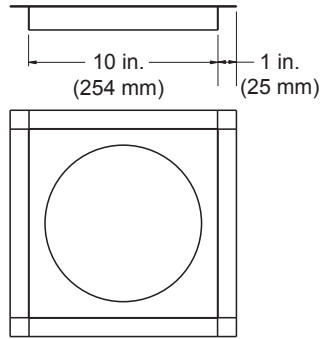


**DVP45**  
**45° Elbow**

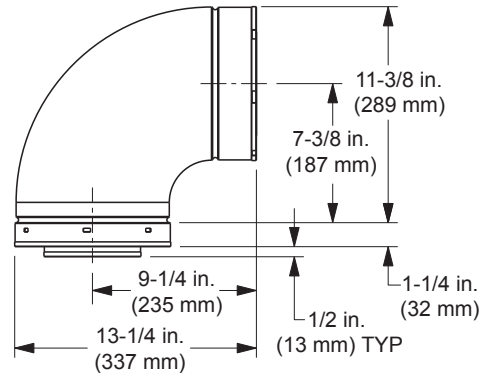


**Assembled**  
Height: 24 in./610 mm  
Diameter: 10 in./254 mm

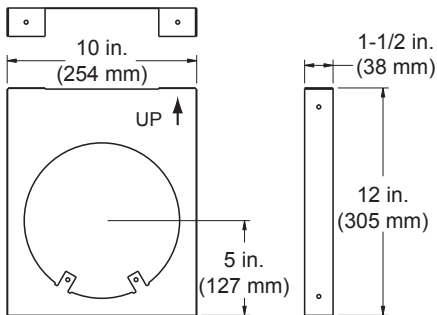
**DVP-AS2**



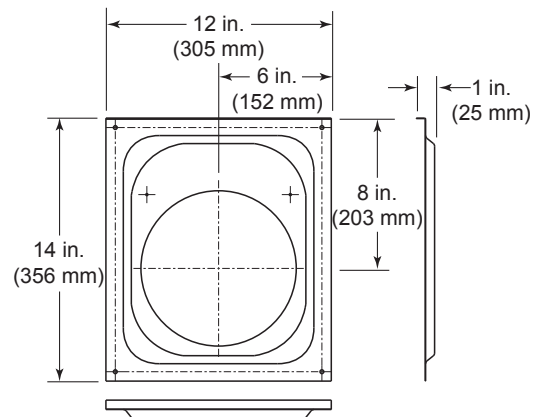
**DVP-FS**  
**Ceiling Firestop**



**DVP90ST**  
**90° Elbow**



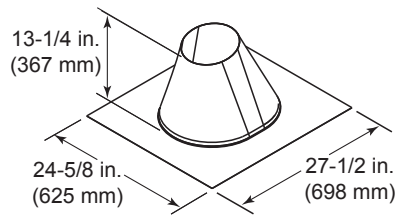
**DVP-HVS**  
**Vent Support**



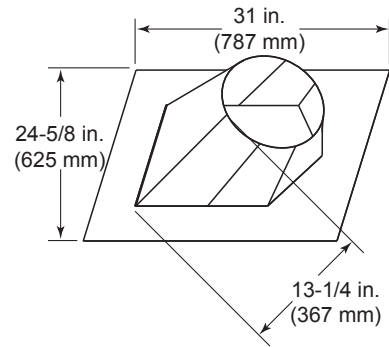
**DVP-WS**  
**Wall Shield Firestop**

Figure 17.2 DVP Vent Components

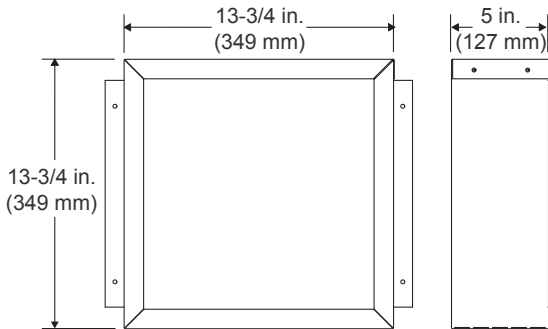
## B. Vent Components Diagrams (continued)



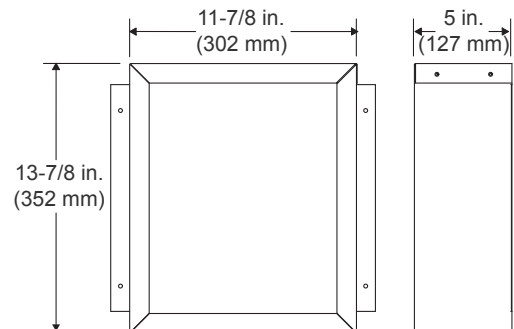
**RF6M**  
Roof Flashing Multi-pak



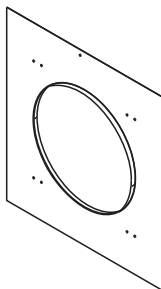
**RF12M**  
Roof Flashing Multi-pak



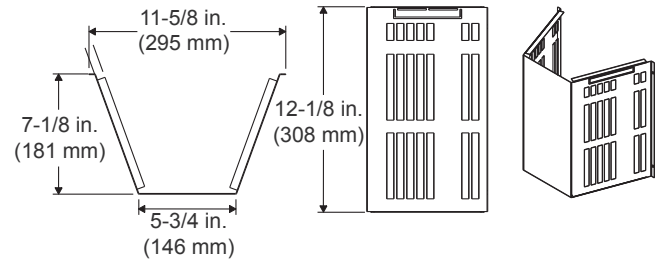
**BEK**  
Trap Cap Brick Extension



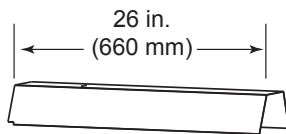
**DVP-BEK2**  
DVP-HPC Cap Brick Extension



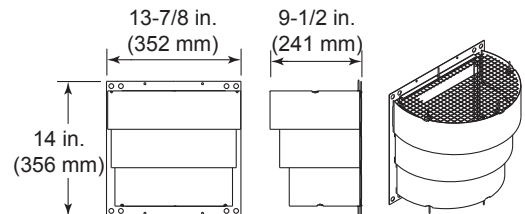
**DVP-TRAPFL**  
Flashing



**COOL-ADD**  
Cap Shield



**DVP-HSM-B**  
Extended Heat Shield

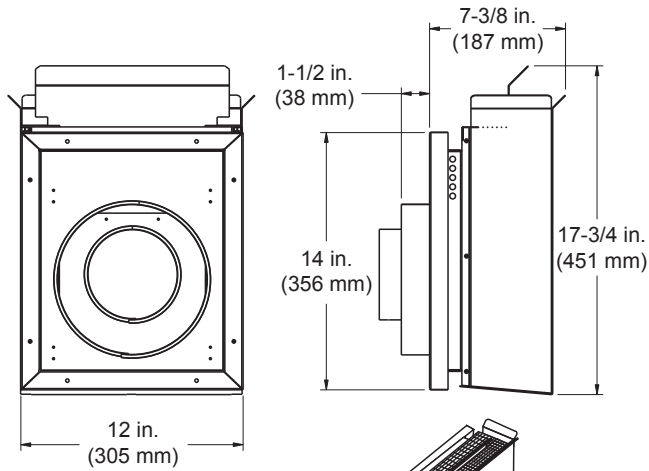


**DRC-RADIUS**  
Cap Shield

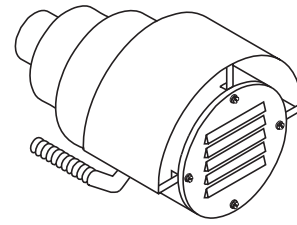
Figure 17.3 DVP Vent Components



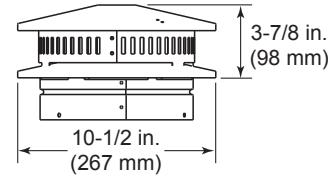
## B. Vent Components Diagrams (continued)



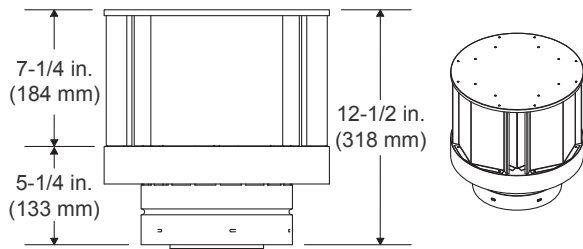
**DVP-TB1**  
Basement Vent Cap



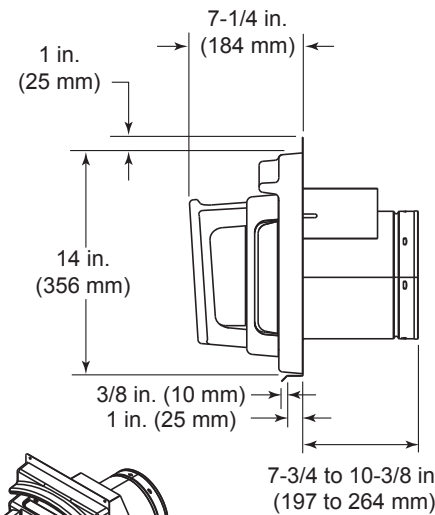
**PVK-80**  
(For use with IPI and DSI appliances only)



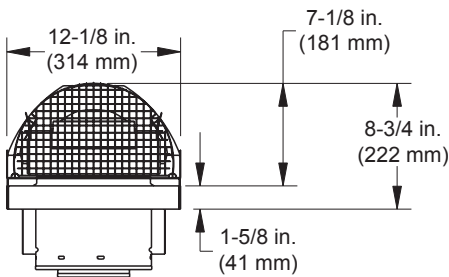
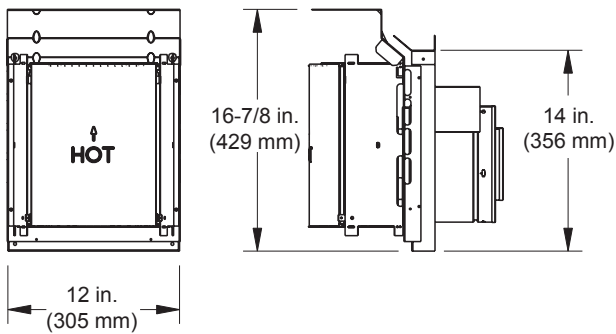
**DVP-TV**  
Vertical Termination Cap



**DVP-TVHW**  
Vertical Termination Cap (High wind)



**DVP-FBHT**  
Fire Brick Termination Cap

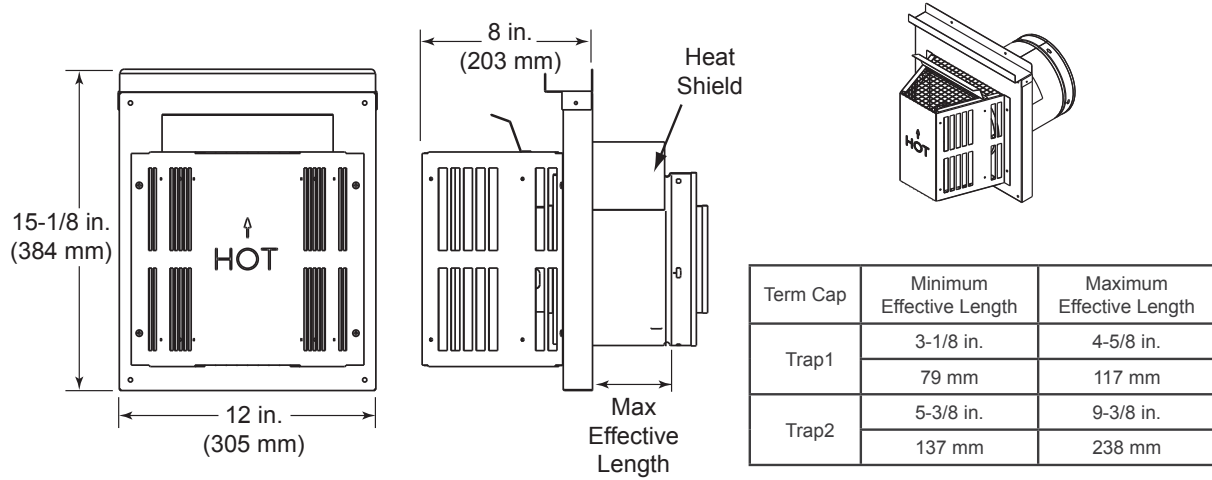


**DVP-HPC**  
High Performance Cap

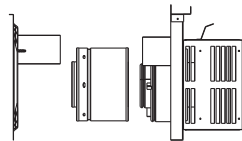
Figure 17.4 DVP Vent Components

## B. Vent Components Diagrams (continued)

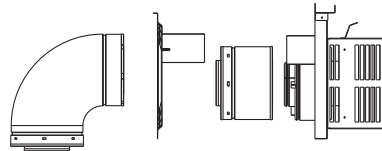
Note: Heat shields MUST overlap by a minimum of 1-1/2 in. (38 mm). **The heat shield is designed to be used on a wall 4 in. to 7-1/4 in. (102 mm to 184 mm) thick.** If wall thickness is less than 4 in. (102 mm) the existing heat shields must be field trimmed. If wall thickness is greater than 7-1/4 in. (184 mm) a DVP-HSM-B will be required.



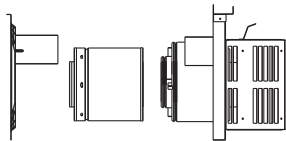
### DVP-TRAP Horizontal Termination Cap



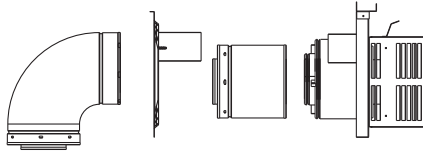
DVP-TRAP1



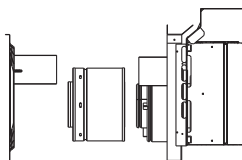
DVP-TRAPK1



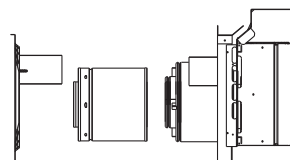
DVP-TRAP2



DVP-TRAPK2



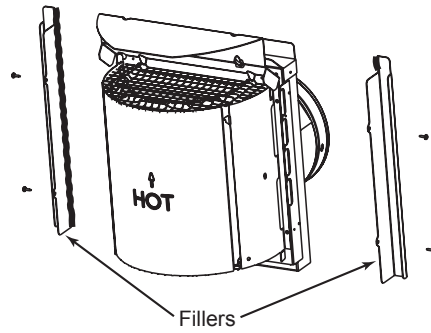
DVP-HPC1



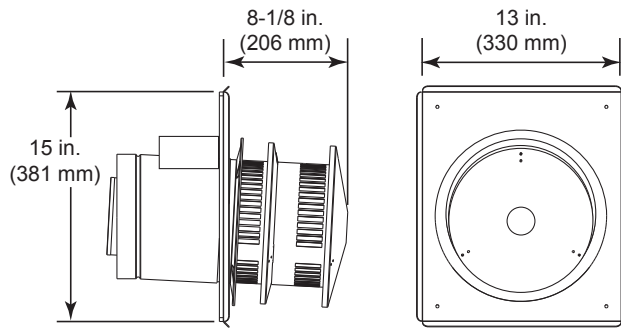
DVP-HPC2

Figure 17.5 DVP Vent Components

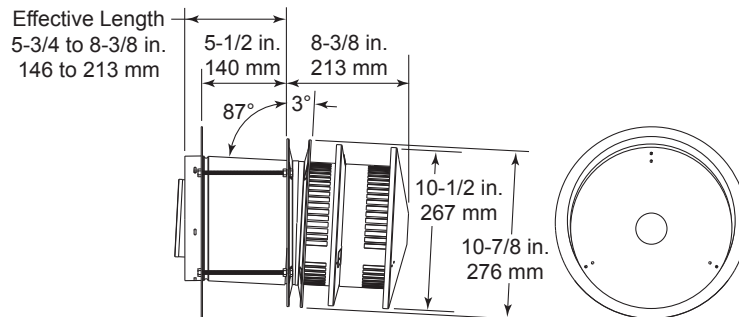
**B. Vent Components Diagrams (continued)**



**DVP-TRAP to DVP-HPC Side Filler Kit**



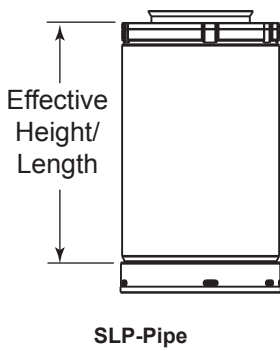
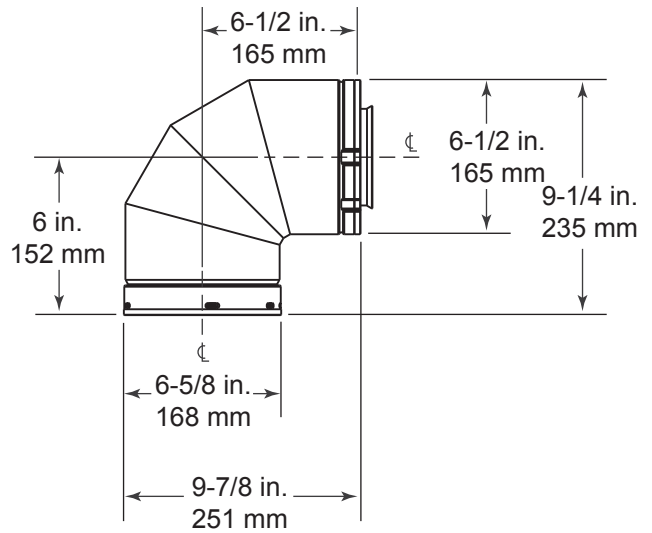
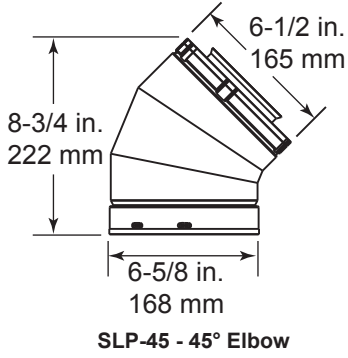
**DVP-HRC-SS**



**DVP-HRC-ZC-SS**

**Figure 17.6 DVP Vent Components**

→ B. Vent Components Diagrams (continued)



Effective Height/Length		
Pipe	inches	mm
SLP4	4	102
SLP6	6	152
SLP12	12	305
SLP24	24	610
SLP36	36	914
SLP48	48	1219
SLP6A	2 - 6	51 - 152
SLP12A	2 - 12	51 - 305

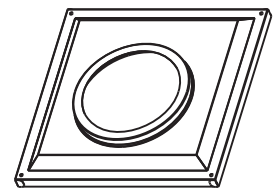
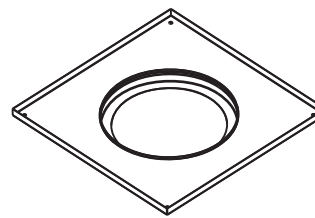
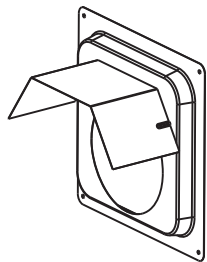
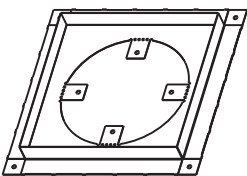
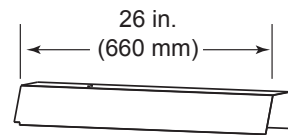
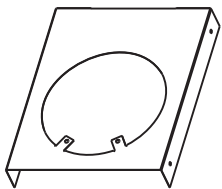
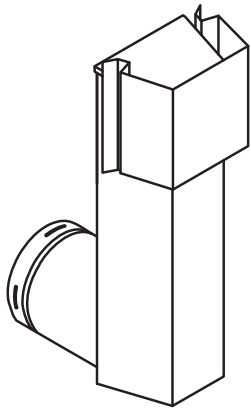
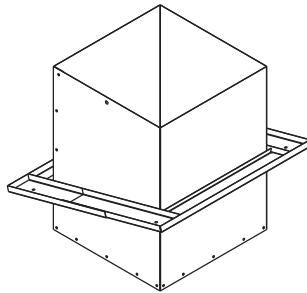


Figure 17.7 SLP Series Vent Components

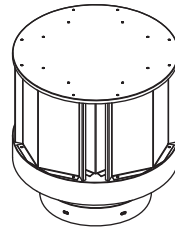
**B. Vent Components Diagrams (continued)**



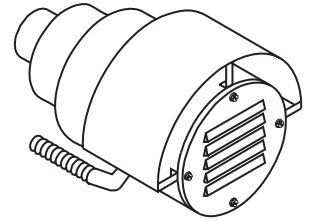
**SLK-SNKD**  
Snorkel  
Termination Cap



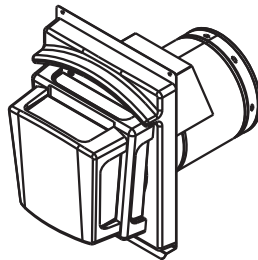
**SLP-CCS-BK**  
Cathedral Ceiling Sup-  
port Box-Black



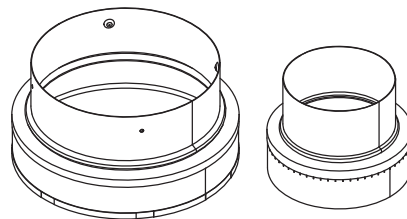
**SLP-TVHW**  
Vertical  
Termination Cap



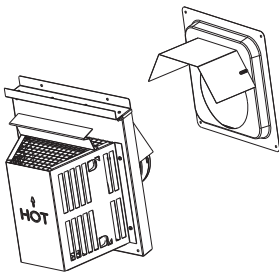
**PVK-80**  
Power Vent



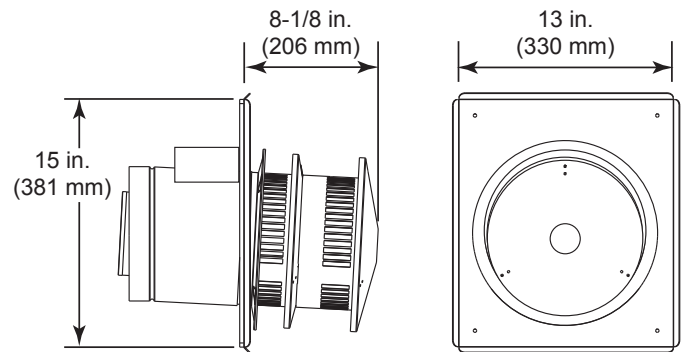
**DVP-FBHT**  
Firebrick Termination Cap  
(This termination cap requires an  
SL-2DVP adapter when used with  
SLP Pipe)



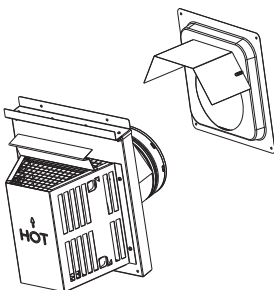
**SL-2DVP**  
Adapter



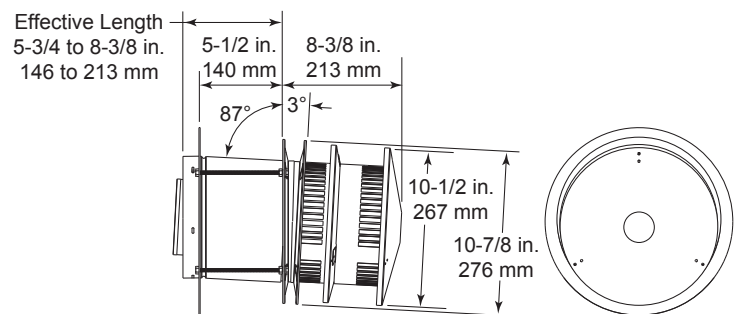
**SLP-TRAP1**  
Horizontal  
Termination Cap



**SLP-HRC-SS**



**SLP-TRAP2**  
Horizontal  
Termination Cap

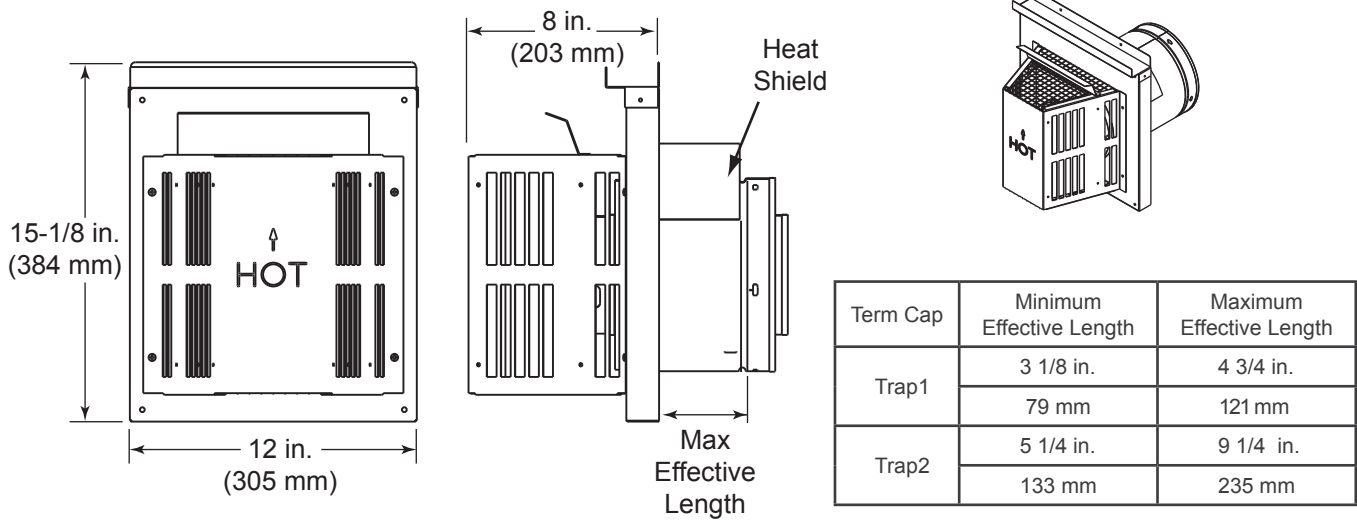


**SLP-HRC-ZC-SS**

**Figure 17.8 SLP Series Vent Components**

## B. Vent Components Diagrams (continued)

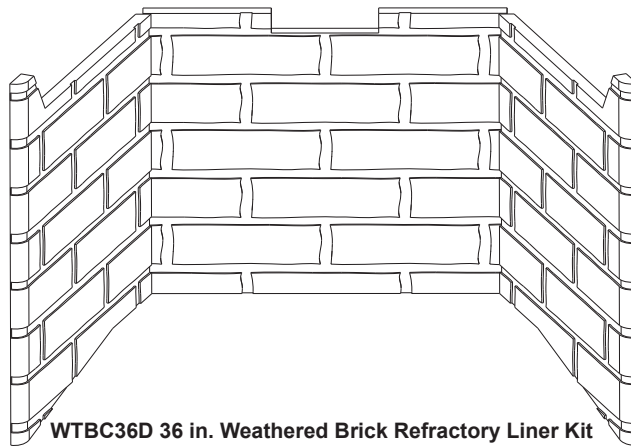
Note: Heat shields MUST overlap by a minimum of 1-1/2 in. (38 mm). **The heat shield is designed to be used on a wall 4 in. to 7-1/4 in. (102 mm to 184 mm) thick.** If wall thickness is less than 4 in. (102 mm) the existing heat shields must be field trimmed. If wall thickness is greater than 7-1/4 in. (184 mm) a DVP-HSM-B will be required.



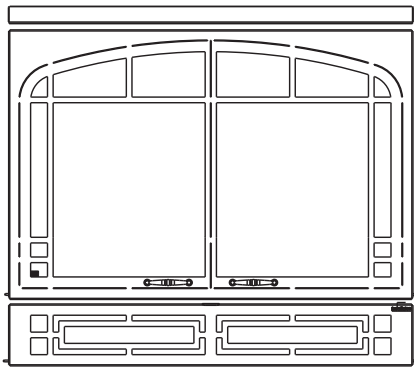
**SLP-TRAP**  
Horizontal Termination Cap

Figure 17.9 SLP Series Vent Components

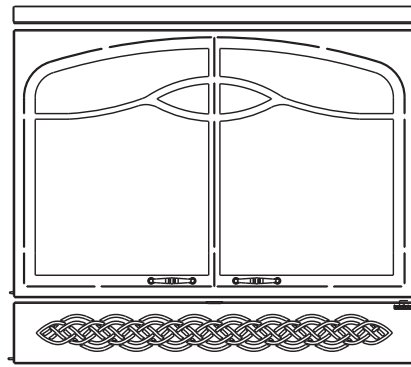
## D. Optional Components



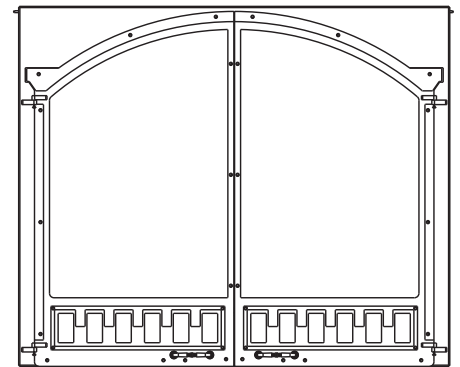
WTBC36D 36 in. Weathered Brick Refractory Liner Kit  
WTBC42D 42 in. Weathered Brick Refractory Liner Kit



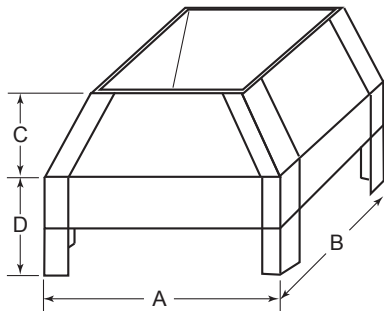
Arts & Crafts Faux Front  
FFCAC



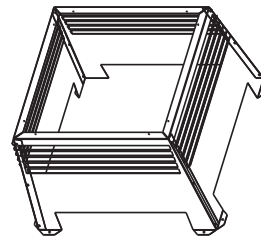
Modernist Faux Front  
FFCM



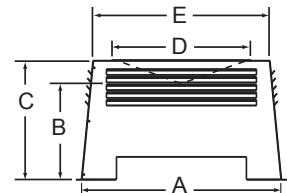
Jamestown Faux Front  
FFCJ



LDS33/LDS46 Decorative Shroud

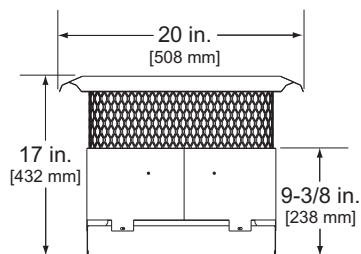


LDS-BV Decorative Shroud



Catalog #	A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
LDS33	36	914	36	914	8.5	216	11	279
LDS46	48	1219	72	1829	8.5	216	11	279

Catalog #	A	B	C	E	E	
LDS-BV	in.	26	12.5	15.5	22	23
	mm	660	318	394	533	584



TCG375 Terra Cotta Cap

LDSCP-M Shroud Leg Multipack  
(not shown)

**See your Heatilator dealer for a complete listing of optional components.**

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E. 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](http://www.heatilator.com).

- NOTES -

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**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.

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