meatila

The first name in fireplaces

Models:

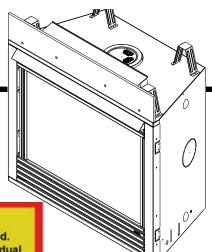
CD4236IR-D

CD4842IR-D

CD4236ILR-D

CD4842ILR-D

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.



Owner's Manual

Installation and Operation

GAS-FIRED







DO NOT DISCARD THIS MANUAL

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

WARNING:

FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

Important operating

and maintenance

instructions included.

- 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.
 - Leave the building immediately.
 - 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.

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.





HOT GLASS WILL CAUSE BURNS.

DO NOT TOUCH GLASS UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.

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 in the United States. or the Standard for Installation in Mobile Homes. CAN/CSA Z240 MH Series, in Canada.

This appliance is only for use with the type(s) of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

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

A. Congratulations

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

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

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

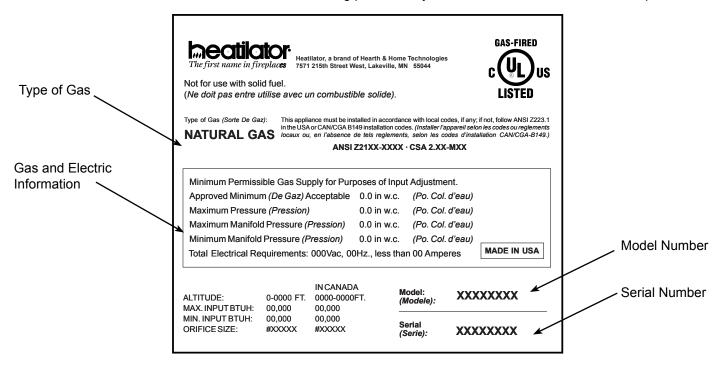
The information contained in this owner's manual, unless noted otherwise, applies to all models and gas control systems.

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

Homeowner Reference Information	We recommend that you record the following pertinent information about your fireplace.
Model Name:	Date purchased/installed:
Serial Number:	Location on fireplace:
Dealership purchased from:	Dealer Phone:
Notes:	

Listing Label Information/Location

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



▲ Safety Alert Key:

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

Table of Contents

A. Congratulations	6 Termination Locations
B. Limited Lifetime Warranty	A. Vent Termination Minimum Clearances 24
1 Listing and Code Approvals	7 Vent Information and Diagrams
A. Appliance Certification	A. Approved Pipe
B. Tempered Glass Specifications 7	B. Vent Table Key
C. BTU Specifications7	C. Use of Elbows
D. High Altitude Installations	D. Measuring Standards
E. Non-Combustible Materials Specification 7	E. Vent Diagrams
F. Combustible Materials Specification 7	E. Volk Blagfallo
G. Electrical Codes	8 Vent Clearances and Framing
H. Requirements for the Commonwealth of Massachusetts 8	A. Pipe Clearances to Combustibles
User Guide	B. Wall Penetration Framing
Oser Guide	C. Install the Ceiling Firestop
2 Operating Instructions	D. Install Attic Insulation Shield
	E. Installing the Optional Heat-Zone® Gas Kit
A. Gas Fireplace Safety	
B. Your Fireplace 9 C. Fan Kit (optional) 10	9 Appliance Preparation
D. Clear Space	A. Top Vent
E. Decorative Doors and Fronts	B. Rear Vent
F. Fixed Glass Assembly	C. Installing the Non-combustible Board 42
G. Remote Controls, Wall Controls and Wall Switches 10	D. Securing and Leveling the Appliance 42
H. IPI Battery Tray/Battery Installation	
I. Control Module Operation	10 Installing Vent Pipe (DVP and SLP Pipe)
J. Before Lighting Fireplace	A. Assemble Vent Sections (DVP Pipe Only) 43
K. Lighting Instructions (IPI)	B. Assemble Vent Sections (SLP Pipe Only) 44
L. After Fireplace is Lit	C. Assemble Slip Sections
M. Frequently Asked Questions	D. Secure the Vent Sections45
	E. Disassemble Vent Sections
3 Maintenance and Service	F. Install Decorative Ceiling Components (SLP only) 46
A. Maintenance Tasks-Homeowner	G. Install Metal Roof Flashing47
B. Maintenance Tasks-Qualified Service Technician 15	H. Assemble and Install Storm Collar 47
C. Logs/Grate and Valve Assembly Removal 16	I. Install Vertical Termination Cap 48
D. Burner Identification/Verification	J. Install Decorative Wall Components (SLP only) 48
	K. Heat Shield Requirements for Horizontal Termination 48
Installer Guide	L. Install Horizontal Termination Cap (DVP and SLP Pipe) . 49
4 Getting Started	11 Gas Information
A. Typical Appliance System	A. Fuel Conversion
B. Design and Installation Considerations 20	B. Gas Pressure
C. Tools and Supplies Needed	C. Gas Connection
D. Inspect Appliance and Components20	D. High Altitude Installations
5 Framing and Clearances	12 Electrical Information
A. Selecting Appliance Location	A. Wiring Requirements
B. Constructing the Appliance Chase	B. IntelliFire [™] Plus Ignition System Wiring
C. Clearances	C. Optional Accessories Requirements 51
D. Mantel and Wall Projections	D. Electrical Service and Repair
	E. Junction Box Installation
	F. Wall Switch Installation for Fan (Optional)

13 Finishing

Α.	Mantel and Wall Projections	. 53
В.	Facing Material	. 53
14	Appliance Setup	
A.	Remove Fixed Glass Assembly	. 54
В.	Remove the Shipping Materials	. 54
C.	Clean the Appliance	. 54
D.	Accessories	. 54
E.	Ember Placement	. 54
F.	Place the Lava Rock and Vermiculite	. 54
G.	Install the Log Assembly	. 55
Н.	Fixed Glass Assembly	. 57
I.	Install Trim and/or Surround	. 57
J.	Air Shutter Setting	. 57
K.	Refractory Color Review	. 57
15	Troubleshooting	
A.	IntelliFire™ Plus Ignition System	. 58
16	Reference Materials	
A.	Appliance/Decorative Front Dimension Diagrams	. 60
В.	Vent Components Diagrams	. 64
C.	Service Parts	. 74
D.	Contact Information	. 78

→ = Contains updated information.

B. Limited Lifetime Warranty

Hearth & Home Technologies LIMITED LIFETIME WARRANTY

Hearth & Home Technologies, 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 original purchase. 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.

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

See conditions, exclusions, and limitations on next page.

B. Limited Lifetime 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.
- This warranty is only valid in the country in which the HHT authorized dealer or distributor that sold the appliance resides.
- 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, batteries and the discoloration of glass.
- 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.

4021-645H 10/15 Page 2 of 2

Listing and Code Approvals

A. Appliance Certification

MODELS: CD4236IR-D, CD4236ILR-D, CD4842IR-D, CD4842ILR-D

LABORATORY: Underwriters Laboratories, Inc. (UL)

TYPE: Direct Vent Gas Appliance Heater

STANDARD: ANSI Z21.88-2014 • CSA 2.33-2014

This product is listed to ANSI standards for "Vented Gas Appliance Heaters" and applicable sections of "Gas Burning Heating Appliances for Manufactured Homes and Recreational Vehicles", and "Gas Fired Appliances for Use at High Altitudes".

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

NOT INTENDED FOR USE AS A PRIMARY HEAT SOURCE.

This appliance is tested and approved as either supplemental room heat or as a decorative appliance. It should not be factored as primary heat in residential heating calculations.

B. Tempered Glass Specifications

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

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

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

C. BTU Specifications

Models U.S. (0-2000 ft. Canada (2000-45	Maximum Input BTU/h	Minimum Input BTU/h	Orifice Size (DMS)	
CD4236IR-D (NG)	US	30,000	16,000	37
CD4236IR-D (NG)	CANADA	27,000	14,400	38
CD4236 D D (D)	US	29,000	16,000	52
CD4236ILR-D (LP)	CANADA	26,100	14,400	53
CD4943ID D (NC)	US	35,000	18,000	33
CD4842IR-D (NG)	CANADA	31,500	16,200	34
CD4943 D D (D)	US	32,500	17,000	51
CD4842ILR-D (LP)	CANADA	29,250	15,300	52

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.

2 Operating Instructions

A. Gas Fireplace Safety

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



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

High temperatures may ignite clothing or other flammable materials.

 Clothing, furniture, draperies, and other flammable materials must not be placed on or near the appliance.

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals. DO NOT operate the appliance with the barrier removed. If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance.

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

Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns.

- A physical barrier is recommended if there are at risk individuals in the house.
- To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children and other at risk individuals out of the room and away from hot surfaces.
- 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: <u>www.</u> <u>hpba.org/safety-information</u>.

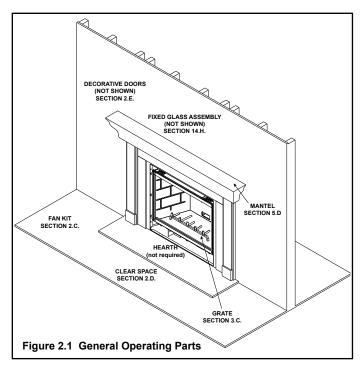
To prevent unintended operation when not using your fireplace for an extended period of time (summer months, vacations, trips, etc):

- · Remove batteries from remote controls.
- · Turn off wall controls.
- Unplug 6 volt transformer 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.



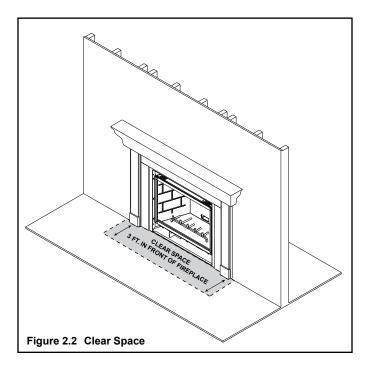
C. Fan Kit (optional)

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.



E. Decorative Doors and Fronts

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

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

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

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

F. Fixed Glass Assembly

See Section 14.H.

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. IPI Battery Tray/Battery Installation

The IntelliFire™ Plus system has a battery backup option. Battery longevity and performance will be affected by the service temperatures of this appliance.

NOTICE: Batteries should only be used as a power source in the event of an emergency such as an outage.

I. Control Module Operation

 The control module has an ON/OFF/REMOTE selector switch that must be set. See Figure 2.3.

OFF Position: Appliance will ignore all power inputs and will not respond to any commands from a wall switch or remote. The unit should be in the OFF position during installation, service, battery installation, fuel conversion, and in the event that the control goes into LOCK-OUT mode as a result of an error code.

ON Position: Appliance will ignite and run continuously in the HI flame setting, with no adjustment in flame output. This mode of operation is primarily used for initial installation or power outage operation with battery backup.

REMOTE Position: Appliance will initiate commands from an optional wired wall switch and/or the wireless remote (RC300).

- 2. If using a wired wall switch with the module in REMOTE mode, the flame output can be adjusted with the HI/LO selector switch on the module. See Figure 2.3. Note that the flame HI/LO selector switch will become inactive once an optional remote control (RC200/RC300) is programmed to the control module. Note that the control module will always ignite the fireplace on HI and remain so for the initial 10 seconds of operation. If the HI/LO is switched to the LO position, the flame output will automatically drop to the lowest setting after the flame has been established for 10 sec. After this 10 second period, the flame can be adjusted from HI to LO with the switch.
- The control module has safety feature that automatically shuts down the fireplace after 9 hours of continuous operation without receiving a command from the RC300 remote.
- 4. If you intend to use both an optional wired wall switch and the RC300 remote control to operate your fireplace, the wall switch will override any commands given by the remote.

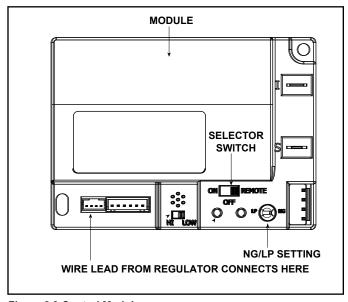


Figure 2.3 Control Module

5. Module Reset

This module may lock-out under certain conditions. When this occurs, the appliance will not ignite or respond to commands. The module will go into lock-out mode by emitting three audible beeps, then continuously displaying a RED/GREEN error code at its status indicator LED.

- Check battery tray. Remove batteries if installed. Batteries should only be installed for use during power outages. See Section H.
- Locate the module selector switch. (See Figure 2.3).
- Set the module selector switch to the OFF position.
- Wait five (5) minutes to allow possible accumulated gas to clear.
- Set the module selector switch to ON or REMOTE position.
- Start the appliance.

WARNING! Risk of Explosion! DO NOT reset the module more than one time within a five minute time period. Gas may accumulate in firebox. Call a qualified service technician.

Nine Hour Safety Shutdown Feature

This appliance has a safety feature that automatically shuts down the fireplace after 9 hours of continuous operation without receiving a command from the RC300 remote.

J. Before Lighting Fireplace

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

- Verify all shipping materials have been removed from inside and/or underneath the firebox.
- Review proper placement of logs, ember material and/ or other decorative materials.
- Ensure plastic finishing strips have been removed after use for incorporating finishing 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.

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.

- A. This appliance is equipped with an intermittent pilot ignition (IPI) device which automatically lights the burner. DO NOT try to light the burner by hand.
- 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.

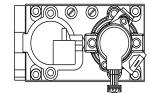
WHAT TO DO IF YOU SMELL GAS

- 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.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, **DO NOT** try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. DO NOT use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS (IPI)

 This appliance is equipped with an ignition device which automatically lights the burner. DO NOT try to light the burner by hand.

> GAS VALVE



- Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the Safety Information located on the top of this label. If you do not smell gas, go to next step.
- 3. To light the burner:

Equipped with wall switch: Turn ON/OFF switch to ON.

Equipped with remote or wall control: Press ON or FLAME button.

Equipped with thermostat: Set temperature to desired setting.

 If the appliance does not light after three tries, call your service technician or gas supplier.

TO TURN OFF GAS TO APPLIANCE

Equipped with wall switch: Turn ON/OFF switch to OFF.
 Equipped with remote or wall control: Press OFF button.
 Equipped with thermostat: Set temperature to lowest setting.

Service technician should turn off electric power to the control when performing service.





HOT GLASS WILL CAUSE BURNS.
DO NOT TOUCH GLASS UNTIL COOLED.
NEVER ALLOW CHILDREN TO TOUCH GLASS.

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.

WARNING:

DO NOT CONNECT LINE VOLTAGE (110/120 VAC OR 220/240 VAC) TO THE CONTROL VALVE.

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

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

If not installed, operated, and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or fuel combustion which are known to the State of California to cause cancer, birth defects, or other reproductive harm.

Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

CAUTION:

Hot while in operation. DO NOT touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

DO NOT operate the appliance with fixed glass assembly removed, cracked or broken. Replacement of the fixed glass assembly should be done by a licensed or qualified service person.

NOT FOR USE WITH SOLID FUEL

For use with natural gas and propane. A conversion kit, as supplied by the manufacturer, shall be used to convert this appliance to the alternate fuel.

Also Certified for Installation in a Bedroom or a Bedsitting Room.

This appliance must be installed in accordance with local codes, if any; if none, follow the National Fuel Gas Code, ANSIZ223.1/ NFPA 54, or the National Gas and Propane Installation code, CSA B149.1.

For additional information on operating your

Hearth & Home Technologies fireplace, please refer to www.fireplaces.com.

593-913i

L. After Fireplace is Lit

Initial Break-in Procedure

- The fireplace should be run three to four hours continuously on high.
- Turn the fireplace off and allow it to completely cool.
- Remove fixed glass assembly. See Section 14.H.
- · 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.

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 the paint and the burning off of any oils remaining from manufacturing. Odor may also be released from finishing materials and adhesives used around the appliance.
Film on the glass	This is a normal result of the curing process of the paint and logs. Glass should be cleaned within 3 to 4 hours of initial burning to remove deposits left by oils from the manufacturing process. A non-abrasive cleaner such as gas fireplace glass cleaner may be necessary. See your dealer.
Metallic noise	Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of the appliance.
Is it normal to see the pilot flame burn continually?	In an intermittent pilot 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 14.H 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 6 volt transformer plug on IPI models.
- Unplug battery backup from control module.

Venting

Frequency: Seasonally

By: Homeowner

Tools needed: Protective gloves and safety glasses.

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

B. Maintenance Tasks-Qualified Service Technician

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

Gasket Seal and Glass Assembly Inspection

Frequency: Annually

By: Qualified Service Technician

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

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

Logs

Frequency: Annually

By: Qualified Service Technician **Tools needed:** Protective gloves.

- Inspect for damaged or missing logs. Replace as necessary. Refer to Section 14 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 Glowing embers with new dime-size pieces.
 DO NOT block ports or obstruct lighting paths. Refer to Section 14 for proper ember placement.
- Verify batteries have been removed from battery backup IPI systems to prevent premature battery failure or leaking.
- Check for smooth lighting and ignition carryover to all ports. Verify that there is no ignition delay.
- · Inspect for lifting or other flame problems.
- Verify air shutter setting is correct. See Section 14 for required air shutter setting. Verify air shutter is clear of dust and debris.
- Inspect orifice for soot, dirt and corrosion. Verify orifice size is correct. See Service Parts List for proper orifice sizing.
- Verify manifold and inlet pressures. Adjust regulator as required.
- Inspect pilot flame pattern and strength. See Figure 3.1 for proper pilot flame pattern. Clean or replace orifice spud as necessary.
- Inspect IPI flame sensing rod for soot, corrosion and deterioration. Polish with fine steel wool or replace as required.
- Verify that there is not a short in flame sense circuit by checking continuity between pilot hood and flame sensing rod. Replace pilot as necessary. (IPI only)



Figure 3.1 IPI Pilot Flame Patterns

C. Logs/Grate and Valve Assembly Removal

It may become necessary to remove the logs/grate and valve assembly. This task should be performed by a qualified service technician. The base pan **does not** need to be removed to service the burner assembly.

1. Remove the two top logs from the log/grate assembly. These logs are not secured to the assembly with screws. See Figure 3.2.



Figure 3.2 Remove Top Two Logs

Remove screw from each tab at the front of the log/grate assembly that secures the assembly to the base pan. See Figure 3.3



Figure 3.3 Remove Screws from Front Tab

3. Remove screws from log tabs on both ends of the rear log and remove the log. See Figure 3.4.



Figure 3.4 Remove Screws from Log Tabs

4. The standard metal refractory will have to be removed in order to access the valve assembly. This is done by removing 8 screws (10 screws for CD4842IR-D model). There are 4 screws per side panel, Figure 3.5 shows the 2 screws on the bottom of panels and Figure 3.6 shows the 2 screws on the top of the panels. The 2 other screws for CD4842IR-D models are located in back wall of firebox as shown in Figure 3.7. One is up by exhaust baffle and the other is behind logs and near fireplace bottom.



Figure 3.5 Bottom Screws For Metal Refractory

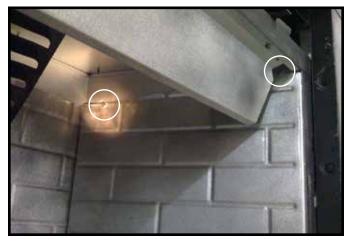


Figure 3.6 Top Screws For Metal Refractory



Figure 3.7 CD4842IR-D Extra Metal Refractory Screws

5. Remove the two screws from the back corners of the burner assembly. See Figure 3.8.



Figure 3.8 Remove Screws from Burner Assembly Rear Corners

6. Remove burner skirt by removing 4 screws. See Figure 3.9.

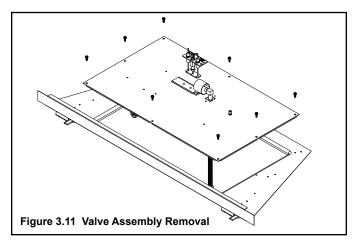


Figure 3.9 Remove Burner Skirt

7. Bend down grate tab at the right of burner assembly. Assembly will slide out to the right. See Figure 3.10.

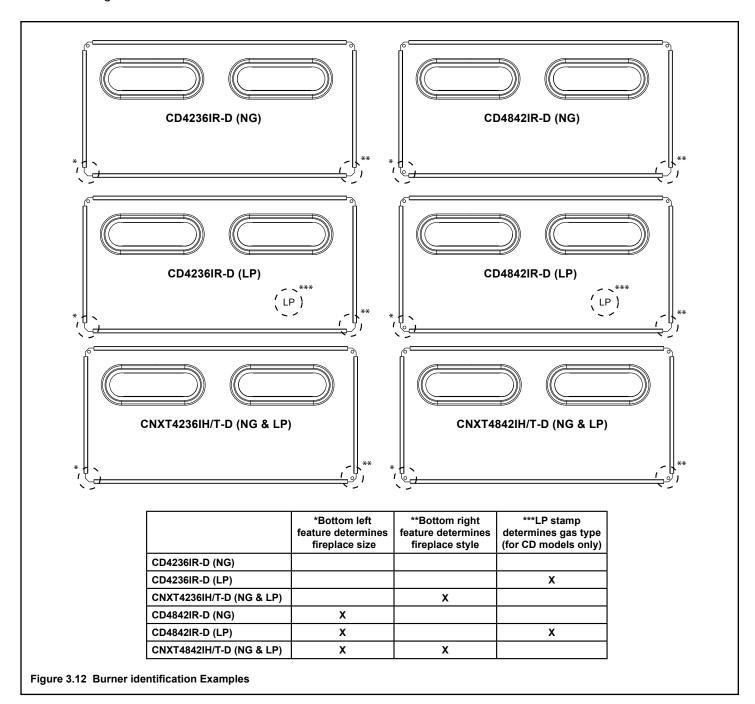


Figure 3.10 Grate Tab



D. Burner Identification/Verification

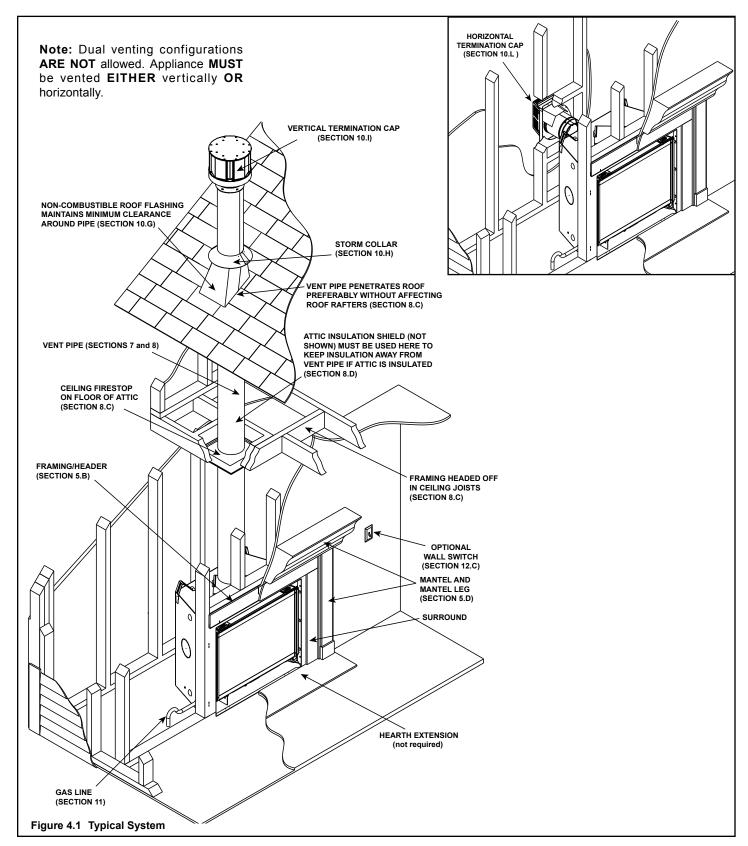
The burner may be accessed for identification and verification purposes. This task should be performed by a qualified service technician. Only the log/grate assembly and burner skirt need to be removed in order to identify burner. See Figure 3.12 for burner identification chart.



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



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 requirements.
- · 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.

Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies recommends HHT Factory Trained or NFI certified professionals.





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 Non-corrosive leak check solution

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

1/2 - 3/4 in. length, #6 or #8 Self-drilling screws

Caulking material (300°F minimum continuous exposure rating)

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.

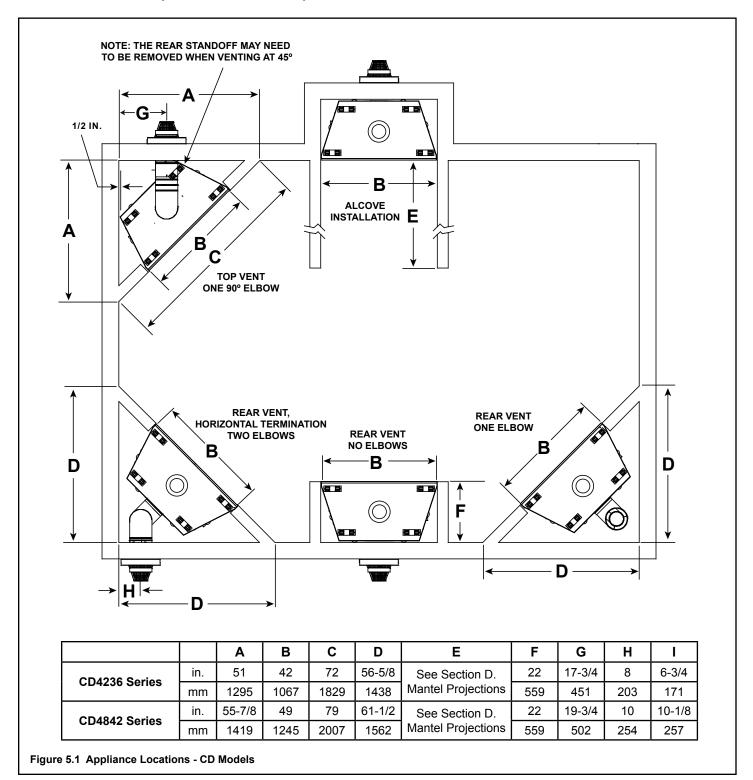
Framing and Clearances

A. Selecting 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.



B. Constructing the Appliance Chase

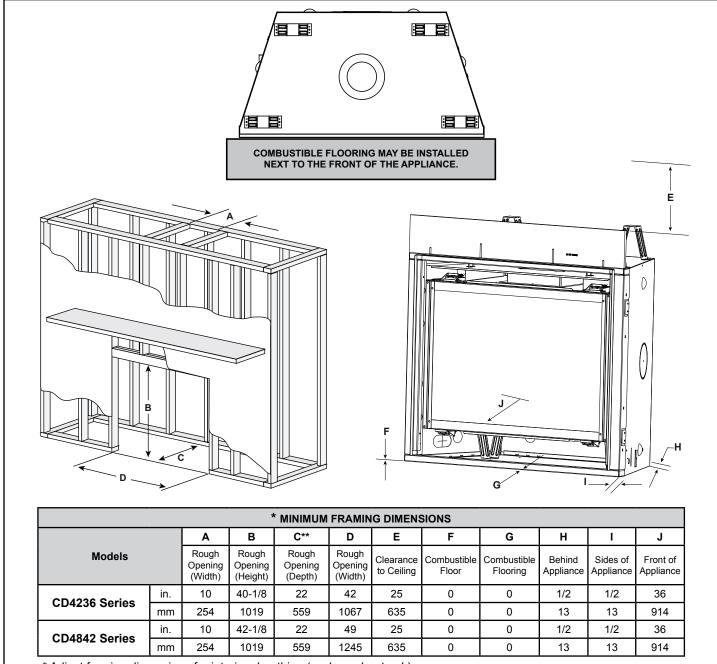
A chase is a vertical box-like structure built to enclose the gas appliance and/or its vent system. In cooler climates the vent should be enclosed inside the chase.

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

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

Walls, ceiling, base plate and cantilever floor of the chase should be insulated. Vapor and air infiltration barriers should be installed in the chase as per regional codes for the rest of the home. Additionally, in regions where cold air infiltration may be an issue, the inside surfaces may be sheetrocked and taped for maximum air tightness.

To further prevent drafts, the wall shield and ceiling firestops should be caulked with caulk with a minimum of 300 °F continuous exposure rating to seal gaps. Gas line holes and other openings should be caulked with caulk with a minimum of 300 °F continuous exposure rating or stuffed with unfaced insulation. If the appliance is being installed on a cement surface, a layer of plywood may be placed underneath to prevent conducting cold up into the room.



^{*} Adjust framing dimensions for interior sheathing (such as sheetrock)

C** Add 12 inches for rear venting with one 90° elbow.

Figure 5.2 Clearances to Combustibles

C. Clearances

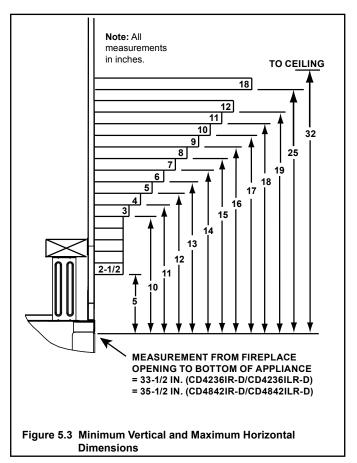
NOTICE: Install appliance on hard metal or wood surfaces extending full width and depth. **DO NOT** install directly on carpeting, vinyl, tile or any combustible material other than wood.

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

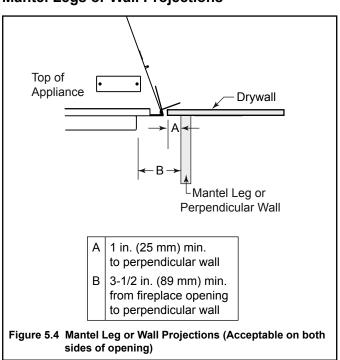
- Insulation and other materials must be secured to prevent accidental contact.
- The chase must be properly blocked to prevent blown insulation or other combustibles from entering and making contact with fireplace or chimney.
- Failure to maintain airspace may cause overheating and a fire.

D. Mantel and Wall Projections

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



Mantel Legs or Wall Projections



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.

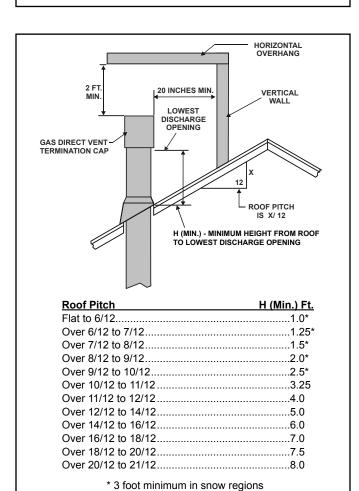
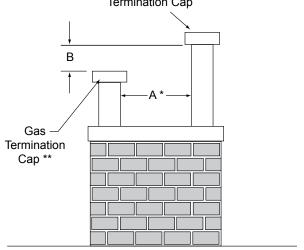


Figure 6.1 Minimum Height From Roof To Lowest Discharge

Opening

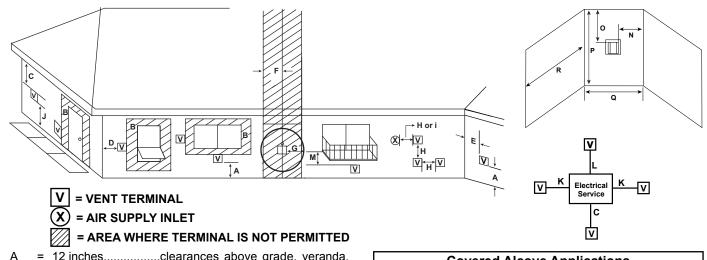
A B
6 in. (minimum) up to 20 in. 18 in. minimum
152 mm/508 mm 457 mm
20 in. and over 0 in. minimum

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 or fuel oil terminations, the wood or fuel oil termination cap must be higher than the gas termination cap.

Figure 6.2 Staggered Termination Caps



		= AREA WHER	RE TERMINAL IS NOT PERMITTED
Α	=	12 inches	.clearances above grade, veranda, porch, deck or balcony
В	=	12 inches	.clearance to window or door that may be opened, or to permanently closed window
С	=	18 inches	.clearance below unventilated soffit
		18 inches	.clearance below ventilated soffit
		30 inches	.clearance below vinyl soffits and electrical service
D	=	9 inches	.clearance to outside corner
Ε	=	6 inches	.clearance to inside corner
F	=	3 ft. (Canada)	.not to be installed above a gas meter/regulator assembly within 3 feet horizontally from the center-line of the regulator
G	=	3 ft	.clearance to gas service regulator vent outlet

H = 9 inches (U.S.A)
12 inches (Canada). clearance to non-mechanical (unpowered) air supply inlet, combustion air

inlet or direct-vent termination

i = 3 ft. (U.S.A.) 6 ft. (Canada).....clearance to a mechanical (powered) air supply inlet

All mechanical air intakes within 10 feet of a termination cap must be a minimum of 3 feet below termination.

= 7 ft.................. On <u>public</u> property: clearance above paved sidewalk or a paved driveway.

A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.

K	=	6 inchesclearance from sides of electrical service			
L	=	12 inchesclearance above electrical service			
	Location of the vent termination must not interfere with access to the electrical service.				

M	= 18 inches	clearance under veranda, porch, deck, balcony or overhang
Per		vinyl or composite overhang

Figure 6.3 Minimum Clearances for Termination

on a minimum of 2 sides beneath the floor.

(Spaces open only on one side and with an overhang)

N = 6 inches non-vinyl sidewalls 12 inches vinyl sidewalls

O = 18 inches non-vinyl soffit and overhang 42 inches vinyl soffit and overhang

P = 8 ft

. 01				
	Q _{MIN}	R _{MAX}		
1 cap	3 feet	2 x Q _{ACTUAL}		
2 caps	6 feet	1 x Q _{ACTUAL}		
3 caps	9 feet	2/3 x Q _{ACTUAL}		
4 caps	12 feet	1/2 x Q ACTUAL		
Q _{MIN} = # termination caps x 3 R _{MAX} = (2 / # termination caps) x Q _{ACTUAL}				

Measure vertical clearances from this surface.

Measure horizontal clearances from this surface.

CAUTION! Risk of Burns! Termination caps are HOT, consider proximity to doors, traffic areas or where people may pass or gather (sidewalk, deck, patio, etc.). Listed cap shields available. Contact your dealer.

- Local codes or regulations may require different clearances.
- Vent system termination is NOT permitted in screened porches.
- Vent system termination is permitted in porch areas with two or more sides open.
- Hearth & Home Technologies assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.
- Vinyl protection kits are suggested for use with vinyl siding.

7

Vent Information and Diagrams

A. Approved Pipe

This appliance is approved for use with Hearth & Home Technologies DVP or SLP venting systems. Refer to Section 16B 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

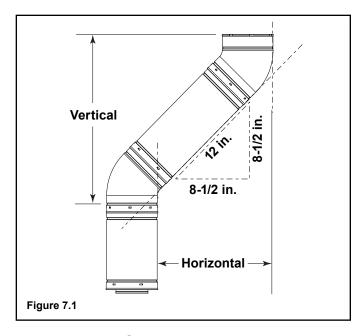
The abbreviations listed in this vent table key are used in the vent diagrams.

Symbol	Description
V ₁	First section (closest to appliance) of vertical length
V ₂	Second section of vertical length
H₁	First section (closest to appliance) of horizontal length
H ₂	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).

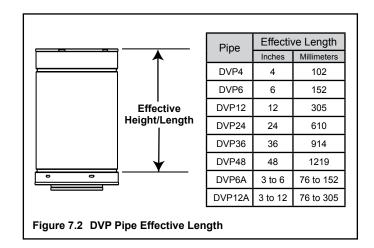
Two 45° elbows may be used in place of one 90° elbow. On 45° runs, one foot of diagonal is equal to 8-1/2 in. (216 mm) horizontal run and 8-1/2 in. (216 mm) vertical run. A length of straight pipe is allowed between two 45° elbows (see Figure 7.1).



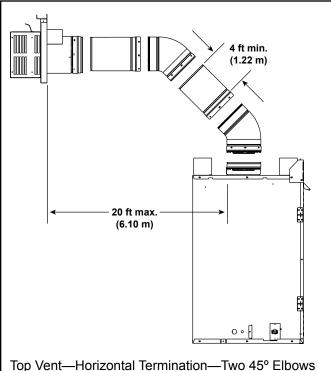
D. Measuring Standards

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) (see Figure 6.3).
- Vertical terminations are measured to bottom of termination cap.
- Horizontal pipe installed level with no rise.
- Horizontal termination cap should have a 1/4 inch downward slant to allow any moisture in cap to be released.



E. Vent Diagrams



Top Vent—Horizontal Termination—Two 45° Elbows Installation requirements to replace the first 90° elbow with two 45° elbows:

Figure 7.3

Top Vent - Horizontal Termination

Note: The CD series fireplaces can adapt to SLP series vent pipe, if desired.

When venting off the top of the unit, use a DVP-2SL adapter and a minimum 48 inch vertical section of SLP series vent pipe.

A DVP-SLP24 adapter may also be used with a 24 inch vertical section of SLP series vent pipe.

After the 48 inch vertical section, the venting table rules must be followed. The first 48 inch **vertical** section is <u>NOT</u> counted as part of the vertical components in the table. It is still counted as part of the overall maximum run. All venting table rules for the vent run must still be followed.

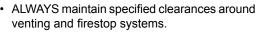
Example: DVP pipe 3 ft. min. vertical = 11 ft. max. horizontal SLP pipe 7 ft. min. vertical = 11 ft. max. horizontal

A WARNING



Fire Risk. Explosion Risk.

Do NOT pack insulation or other combustibles between ceiling firestops.





Install wall shield and ceiling firestops as specified.

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

A WARNING

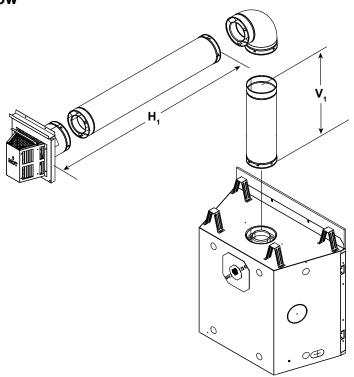


Fire Risk.

When using DVP-HRC-SS and DVP-HRC-ZC-SS termination caps on top vented fireplaces, a 6 inch minimum vertical vent section is required before installing first elbow.

Top Vent - Horizontal Termination

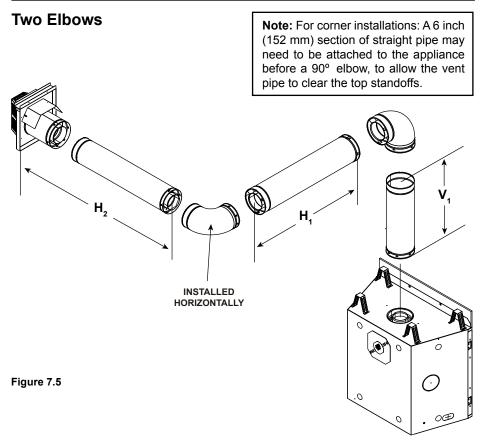
One Elbow



V₁ Mi	nimum	H₁ Maximum			
Elbo	w only	2 ft	610 mm		
1/2 ft.	152 mm	6 ft.	1.8 m		
1 ft.	305 mm	11 ft.	3.4 m		
1-1/2 ft.	457 mm	18 ft.	5.5 m		
2 ft.	610 mm	25 ft.	7.6 m		
V ₁ + H ₁ = 40 ft. (12.2 m) Maximum H = 25 ft. (7.6 m) Maximum					

Note: For corner installations: A 6 inch (152 mm) section of straight pipe may need to be attached to the appliance before a 90° elbow, to allow the vent pipe to clear the top standoffs.

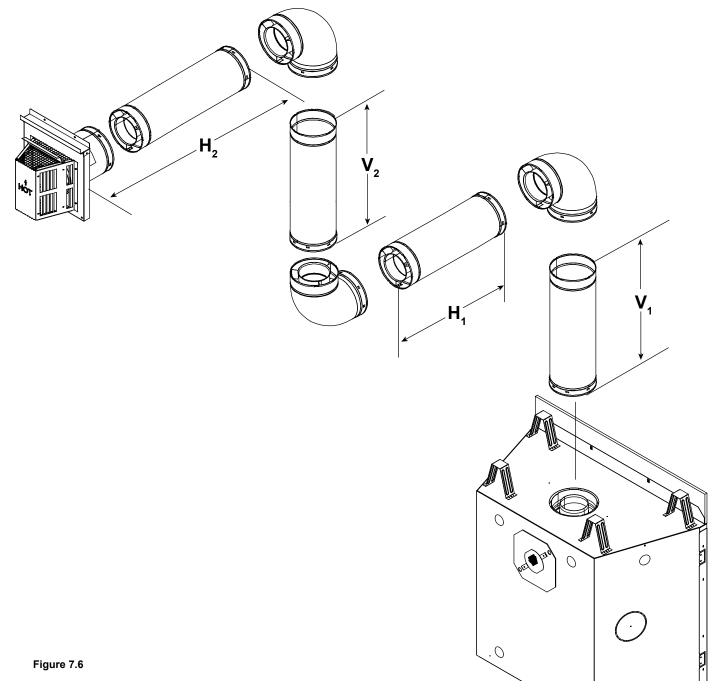
Figure 7.4



V₁ Mir	nimum	H ₁ + H ₂ Maximum			
Elbov	v only	2 ft	610 mm		
1/2 ft.	152 mm	6 ft.	1.8 m		
1 ft.	305 mm	11 ft.	3.4 m		
1-1/2 ft.	457 mm	18 ft.	5.5 m		
2 ft.	610 mm	25 ft.	7.6 m		
$V_1 + H_1 + H_2 = 40 \text{ ft. } (12.2 \text{ m}) \text{ Maximum}$ H + H = 25 ft (7.6 m) Maximum					

Three Elbows

V ₁	Min.	H ₁ N	Max.	V ₂ Min.		H ₂ Max.	
Elbo	w only	2 ft.	610 mm	0 in.	0 mm	1 ft.	305 mm
6 in.	152 mm	3 ft	914 mm	6 in.	152 mm	2 ft.	610 mm
1 ft.	305 mm	6 ft.	1.8 m	1 ft.	305 mm	6 ft.	1.8 m
2 ft.	610 mm	11 ft.*	3.4 m*	2 ft.	610 mm	10 ft.*	3.1 m*
3 ft.	914 mm	16 ft *	4.9 m*	3 ft.	914 mm	14 ft.*	4.3 m*
$*H_1 + H_2 = 20 \text{ ft. } (6.1 \text{ m}) \text{ Maximum}$ $V_1 + V_2 + H_1 + H_2 = 40 \text{ ft. } (12.2 \text{ m}) \text{ Maximum}$							

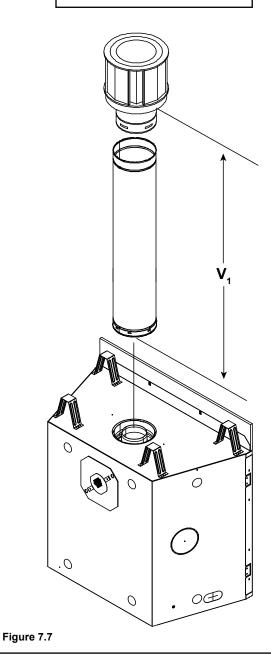


Top Vent - Vertical Termination

No Elbow

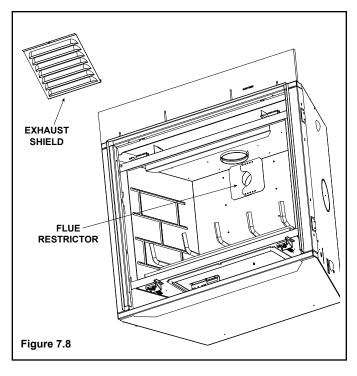
V₁ = 60 ft. Max. (18.3 m) V₁ = 3 ft. Min. (914 mm)

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



Flue Restrictor Instructions

- 1. Remove exhaust shield using a 1/4 inch nut driver by removing the four screws securing it in place. See Figure 7.8.
- 2. Break the flue restrictor into two pieces. Do this by bending the part back and forth until it breaks. See Figure 7.10.



- 3. Match the amount of vertical you have in the system with the chart to find the appropriate position to set the flue restrictor. See Figure 7.9 and 7.10.
- 4. Center the two flue restrictor pieces on the vent at the setting selected in step 3 and secure in place by using two self-tapping screws. See Figure 7.8.
- 5. Reinstall the exhaust shield.

Vertical	TOP	VENT	REAR VENT		
vertical	NG	LP	NG	LP	
4 ft.	1-1	No Restrictor	No Restrictor	No Restrictor	
8 ft.	2-2	1-2	1-1	No Restrictor	
15 ft.	3-3	3-2	2-2	1-2	
20 ft.	3-4	3-3	3-3	2-3	
25 ft.	3-4	3-3	3-3	2-3	
30 ft.	4-4	3-4	3-4	3-3	
35 ft.	4-4	3-4	3-4	3-3	
40 ft.	4-4	4-4	4-4	3-4	
50 ft.+	4-4	4-4	4-4	4-4	

Figure 7.9

Top Vent - Vertical Termination (continued)

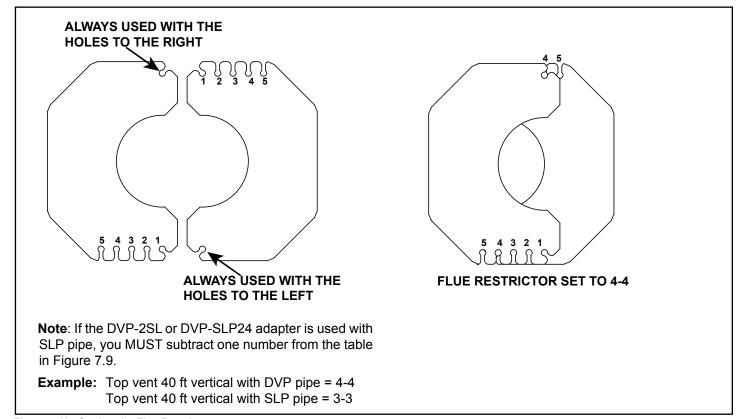
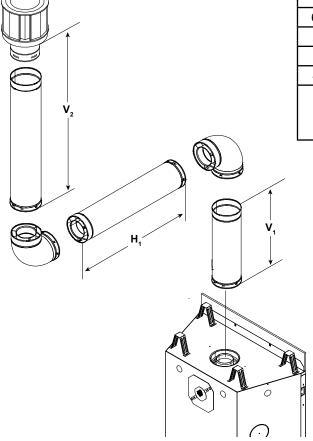


Figure 7.10. Setting the Flue Restrictor

Two Elbows



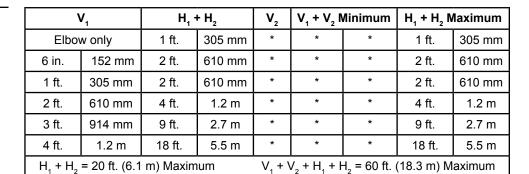
L		V ₁	H₁ M	axımum	V ₂	V ₁ + V	Min.
	Elbow only		2 ft.	610 mm	*	*	*
	6 in.	152 mm	6 ft.	1.8 m	*	*	*
	2 ft.	610 mm	11 ft.	3.4 m	*	*	*
	3 ft.	914 mm	16 ft.	4.9 m	*	*	*
	4 ft.	1.2 m	20 ft.	6.1 m	*	*	*

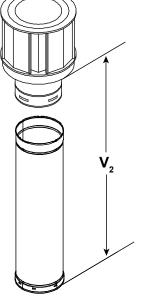
 $V_1 + V_2 + H_1 = 60$ ft. (18.3 m) Maximum *No specific restrictions on this value EXCEPT $V_1 + V_2 + H_1$ cannot exceed 60 ft (15.2 m)

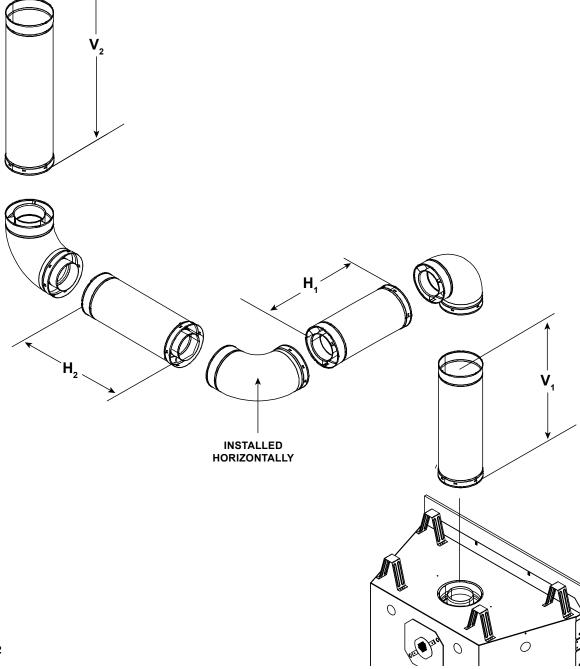
Figure 7.11

Top Vent - Vertical Termination - (continued)

Three Elbows







No Elbow

 $H_1 = 18 \text{ in. (457 mm) Maximum}$

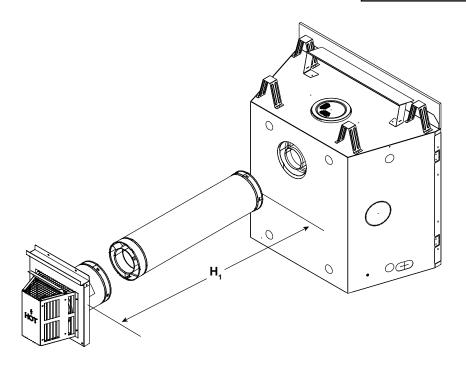


Figure 7.13

One 45° Elbow

H₁= 12 in. (305 mm) Maximum CD4236IR H₁= 15 in. (381 mm) Maximum CD4842IR

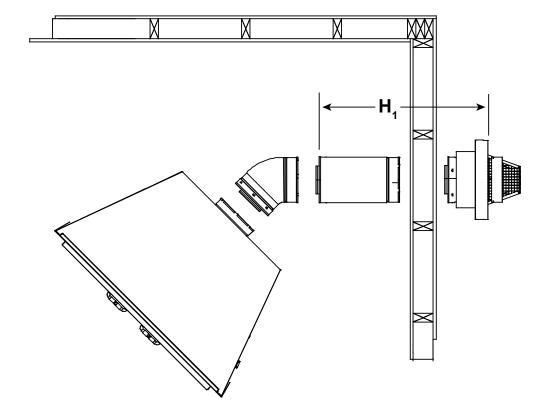


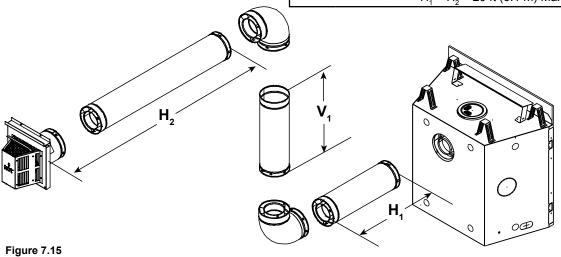
Figure 7.14

Rear Vent - Horizontal Termination - (continued)

Two Elbows

H ₁ Ma	ximum	V ₁ M	inimum	H ₂		H ₁ + H ₂ Maximum	
1 ft.	305 mm		to Back Elbows	1 ft.	305 mm	2 ft.	610 mm
2 ft.	610 mm	6 in.	152 mm	2 ft.	610 mm	4 ft.	1.2 m
3 ft.	914 mm	1 ft.	305 mm	2 ft.	610 mm	5 ft.	1.5 m
3 ft.	914 mm	2 ft.	610 mm	4 ft.	1.2 m	7 ft.	2.1 m
3 ft.	914 mm	3 ft.	914 mm	9 ft.	2.7 m	12 ft.	3.7 m
3 ft.	914 mm	4 ft	1.2 m	17 ft.	5.2 m	20 ft.*	6.1 m*

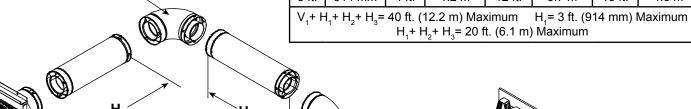
 $V_1 + H_1 + H_2 = 40$ ft. (12.2 m) Maximum $H_1 = 3$ ft. (914 mm) Maximum ${}^*\!H_1 + H_2 = 20$ ft (6.1 m) Maximum

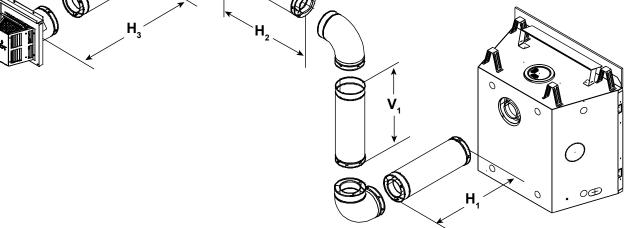


Three Elbows

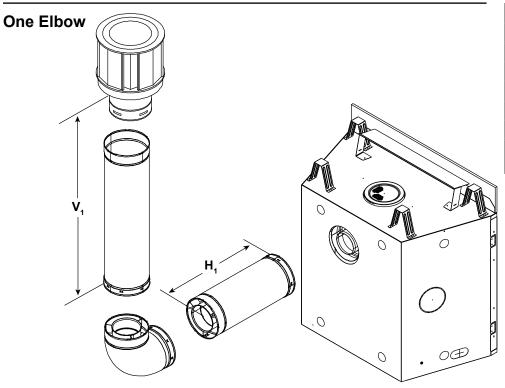
INSTALLED HORIZONTALLY

H₁ N	laximum	V ₁ N	linimum	H ₂ + H ₃		H ₁ + H ₂ + H ₃ Max.	
1 ft.	305 mm		to Back Elbows	1 ft.	305 mm	2 ft.	610 mm
2 ft.	610 mm	6 in.	152 mm	1.5 ft.	457 mm	3.5 ft.	1.1 m
3 ft.	914 mm	1 ft.	305 mm	2 ft.	610 mm	5 ft.	1.5 m
3 ft.	914 mm	2 ft.	610 mm	4 ft.	1.2 m	7 ft.	2.1 m
3 ft.	914 mm	3 ft.	914 mm	9 ft.	2.7 m	12 ft.	3.7 m
3 ft.	914 mm	4 ft.	1.2 m	12 ft.	3.7 m	15 ft.	4.6 m





Rear Vent - Vertical Termination



V₁ Min	imum	H ₁ Maximum					
6 in.	152 mm	2 ft.	610 mm				
1 ft.	305 mm	3 ft.	914 mm				
2 ft.	610 mm	5 ft.	1.5 m				
3 ft.	914 mm	7 ft.	2.1 m				
4 ft.	1.2 m	8 ft.	2.4 m				
5 ft.	1.5 m	8 ft.	2.4 m				

 $V_1 + H_1 = 40 \text{ ft. } (12.2 \text{ m}) \text{ Maximum}$ $H_1 = 8 \text{ ft. } (2.4 \text{ m}) \text{ Maximum}$

Figure 7.17

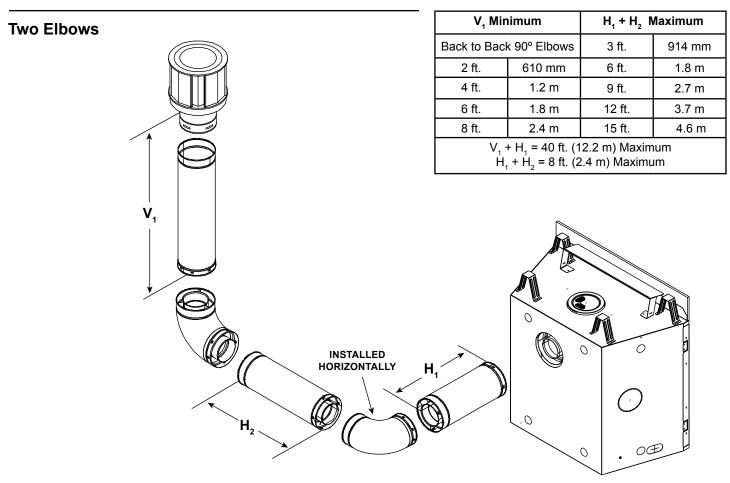


Figure 7.18

Rear Vent - Vertical Termination - (continued)

V₁ Minimum H, Maximum H₄ + H₅ Maximum Η, Three Elbows 610 2 ft. 610 mm 6 in. 152 mm 2 ft. 4 ft. 1.2 m mm 3 ft. 914 mm 1 ft. 305 mm 4 ft. 1.2 m 7 ft. 2.1 m 5 ft. 610 mm 1.5 m 2 ft. 6 ft. 1.8 m 11 ft. 3.4 m 914 mm 15 ft. 4.6 m 7 ft. 2.1 m 3 ft. 8 ft. 2.4 m 8 ft 2.4 m 4 ft. 1.2 m 10 ft. 3.1 m 18 ft. 5.5 m H_1 = 8 ft (2.4 m) Max. $V_1 + V_2 + H_1 + H_2 = 40 \text{ ft (12.2 m) Max.}$ $H_1 + H_2 = 20 \text{ ft (6.1 m) Max.}$

Figure 7.19

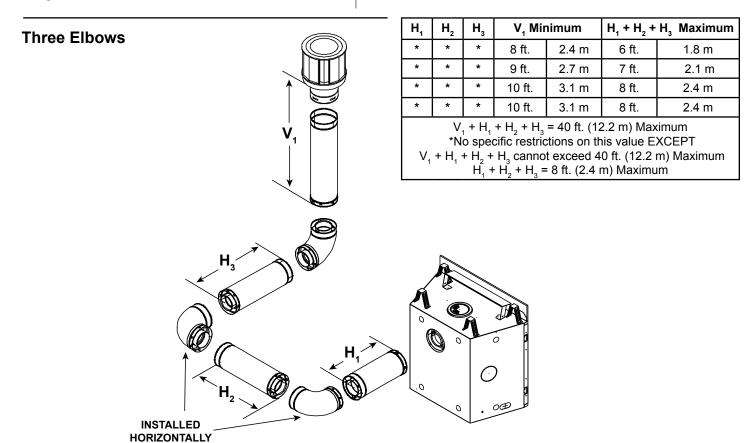


Figure 7.20

36

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.

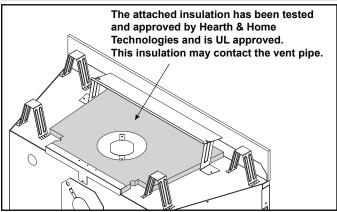
Note: Heat shields MUST overlap by a minimum of 1-1/2 in. (38 mm).

• DVP heat shield - 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. the existing heat shields must be field trimmed. If wall thickness is greater than 7-1/4 in. a DVP-HSM-B will be required.
- SLP heat shield designed to be used on a wall 4-3/8 in. to 7-5/8 in. (111 mm to 194 mm thick).

• If wall thickness is less than 4-3/8 the existing heat shields must be field trimmed. If wall thickness is greater than 7-5/8 in. a DVP-HSM-B will be required. (DVP-SLP Pipe Shown) Heat 3 in. (76 mm) Shield top clearance 3 in. (76 mm) - Heat top clearance Shield 1 in (25 mm) clearance around vertical sections Wall bottom & sides Shield Firestop WAL 3 in. (76 mm) Heat Shield top clearance Shield in. (25 mm) Wall clearance Shield bottom & sides Firestor When using SLP pipe, minimum clearances from the vent pipe to combustible materi-Top: 2-1/2 in. (64 mm) Bottom: 1/2 in. (13 mm) Sides: 1 in. (25 mm)

Figure 8.1 Horizontal Venting Clearances To Combustible Materials



→ Figure 8.2 CD4842IR-D, CD4842ILR-D Top Insulation

B. Wall Penetration Framing

Combustible Wall Penetration

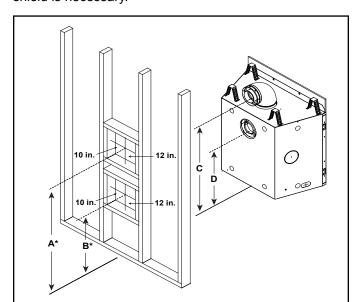
Whenever a combustible wall is penetrated, you must frame a hole for the wall shield firestop(s). The wall shield firestop maintains minimum clearances and prevents cold air infiltration.

- 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 (refer to Section 16.B.) 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 noncombustible materials such as concrete, a hole with diameter one inch 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.



		A *	B*	С	D
CD4236	in.	42-3/4	27-7/8	41-3/4	26-7/8
CD4230	mm	1086	708	1060	683
CD4842	in.	45-1/8	29-7/8	44-1/8	28-7/8
CD4842	mm	1146	759	1111	733

^{*} Shows center of vent framing hole for top or rear venting. The center of the hole is one (1) in. (25.4 mm) above the center of the horizontal vent pipe.

Figure 8.3 Wall Penetration

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.

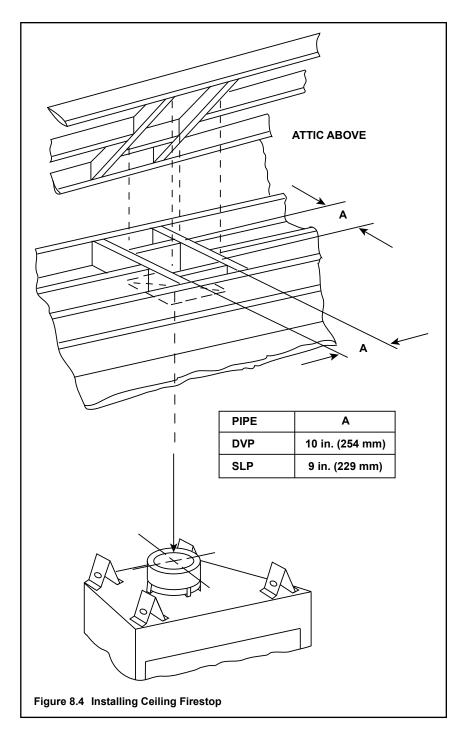
WARNING! Risk of Fire! DO NOT pack insulation around the vent. Insulation must be kept back from the pipe to prevent overheating.

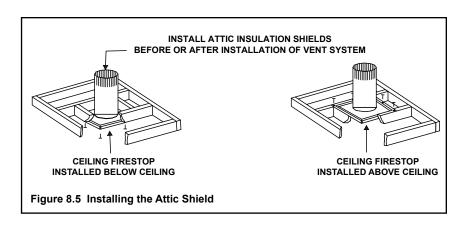
D. Install Attic Insulation Shield

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

The International Fuel Gas Code requires an attic shield constructed of 26 gauge minimum steel that extends at least 2 in. (51 mm) above insulation.

- Attic insulation shields must meet specified clearances to combustible materials and be secured in place.
- An attic insulation shield kit is available from Hearth & Home Technologies. Contact your dealer to order. Install attic insulation shield according to instructions included with kit.

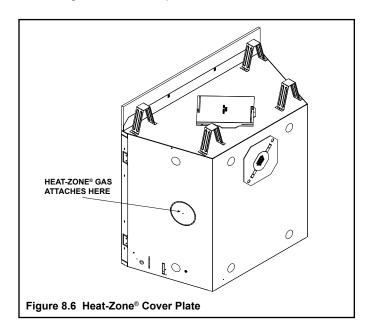




E. Installing the Optional Heat-Zone® Gas Kit

- Remove the knockout from the fireplace and discard it (see Figure 8.6).
- Center the duct collar around the exposed hole and attach it to the fireplace with 3 screws. Note: Do this BEFORE final positioning of fireplace.
- Determine the location for the air register/fan housing assembly.

Reference the Heat-Zone® Gas kit instructions for the remaining installation steps.



9

Appliance Preparation

A. Top 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.

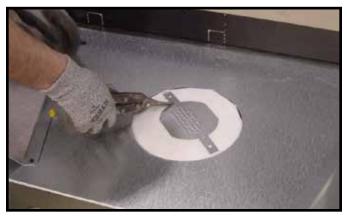


Figure 9.1 Cut the seal cap strap across the rectangles next to the disk. For rear vent, skip this step.



Figure 9.2 Remove the white gasket material covering the seal cap.



Figure 9.3 Remove the seal cap.

NOTICE: Once the seal cap has been removed it CANNOT be reattached.



Figure 9.4 Remove the insulation basket and white insulation from the center vent pipe.



Figure 9.5 Remove the insulation from the outer vent pipe. For rear venting there is no insulation in the outer vent pipe.



Figure 9.6 To attach the first section of vent pipe, make sure to use the fiberglass gasket in the manual bag to seal between the first vent component and the outer fireplace wrap. Use 2 self tapping screws to secure the gasket to the outer wrap.

Secure the first section of venting to the fireplace by screwing through the two straps left over from cutting the seal cap strap in step 2.

B. 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.

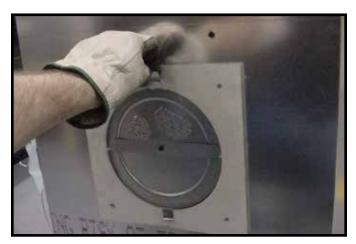


Figure 9.7 Fold the tabs toward the center of the seal cap (90°) and remove the insulation gasket.



Figure 9.8 Cut the metal retaining band and fold the sides out.



Figure 9.9 Fold the center parts of the retaining band out and use to remove the seal cap.

NOTICE: Once the seal cap has been removed it CANNOT be reattached.



Figure 9.10 Discard the vent cap, remove and discard the insulation basket.

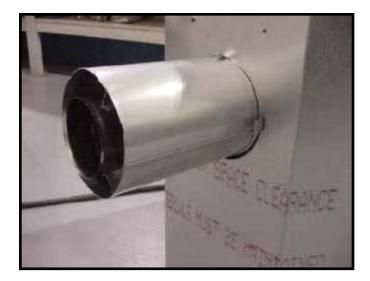
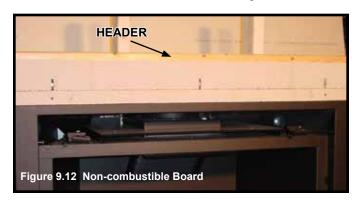


Figure 9.11 Attach the first vent section (it will snap into place). Slide the insulation gasket onto the vent section, up against the appliance and over the tabs.

C. Installing the Non-combustible Board

The factory supplied non-combustible board spans the distance from the top of the fireplace to the center of the framing header. This board must be used. See Figure 9.12.



D. Securing and Leveling 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 blownin insulation. Make sure insulation and other materials are secured.

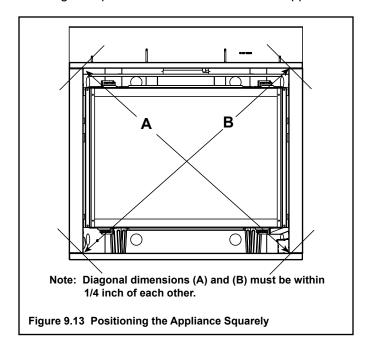
DO NOT notch the framing around the appliance standoffs.

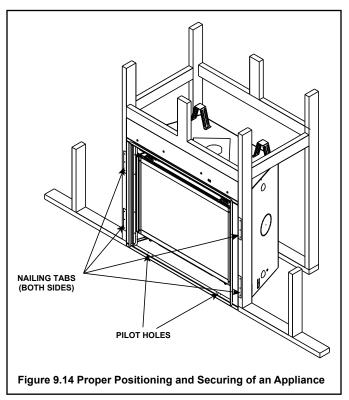
Failure to maintain air space clearance may cause overheating and fire.

The diagram shows how to properly position and secure the appliance (see Figure 9.15). 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.
- "Square" the unit by securing diagonal dimensions to within 1/4 inch of each other. See Figure 9.13.
- 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.





Installing Vent Pipe (DVP and SLP Pipe)

A. Assemble Vent Sections (DVP Pipe Only) Attach Vent to the Firebox Assembly

Note: The end of the pipe sections with the lanced tabs will face toward 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 silicone with a minimum of 300 °F continuous exposure rating, 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



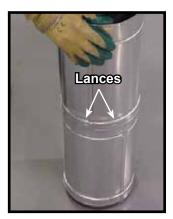
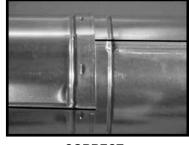


Figure 10.2

Figure 10.3

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



CORRECT

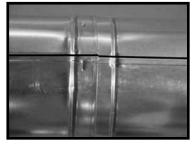


Figure 10.4 Seams

INCORRECT

B. Assemble Vent Sections (SLP Pipe Only)

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

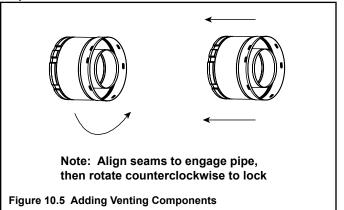
- Attach a DVP-2SL or DVP-SLP24 adapter to the starting collar of the appliance.
- Lock the vent components into place by sliding the pipe section onto the collar.
- Align the seam of the pipe and seam of collar to allow engagement. Rotate the vent component to lock into place. Use this procedure for 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.
 Caulk with a minimum of 300 °F continuous exposure rating 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 silicone with a minimum of 300 $^{\circ}$ F continuous exposure rating, 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.



C. Assemble Slip Sections

- 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.

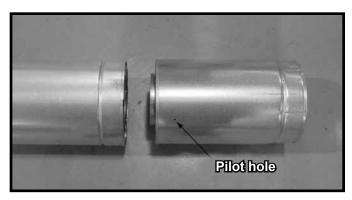


Figure 10.6 Slip Section Pilot Holes

- 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.

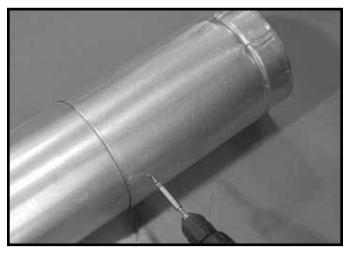


Figure 10.7 Screws into Slip Section

 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 originating off the top of the appliance, with no offsets, must be supported every 8 ft. (2.44 m) after the maximum allowed 25 ft. (7.62 m) of unsupported rise.
- · Vertical runs originating off the rear of the appliance, or after any elbow, must be supported every 8 ft. (2.44 m).
- · Horizontal runs must be supported every 5 feet (1.52 m).
- Vent supports or plumbers strap (spaced 120° apart) may be used to support vent sections. See Figures 7.8 and 7.9.
- Wall shield firestops may be used to provide horizontal support to vent sections.
- · 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.

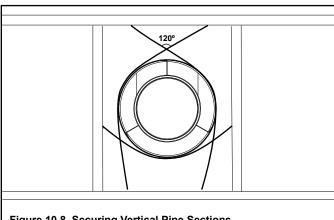
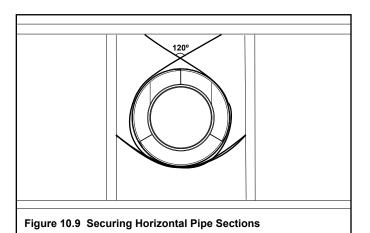


Figure 10.8 Securing Vertical Pipe Sections



E. Disassemble Vent Sections

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

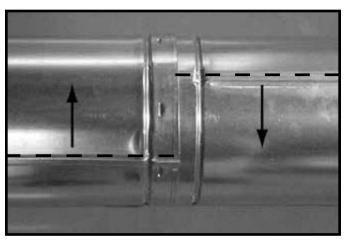


Figure 10.10 Rotate Seams for Disassembly

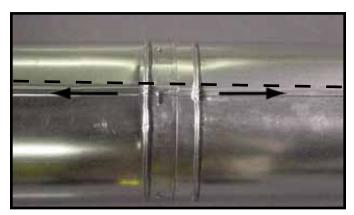


Figure 10.11 Align and Disassemble Vent Sections

F. Install Decorative Ceiling Components (SLP only)

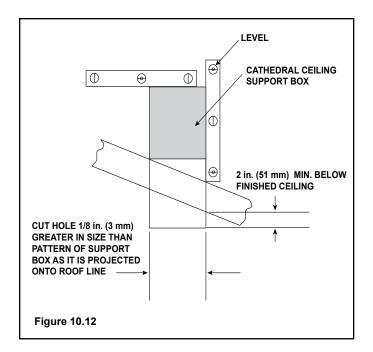
A decorative ceiling thimble can be installed on a flat ceiling through which the vent passes. The decorative ceiling thimble is used to cover the firestop.

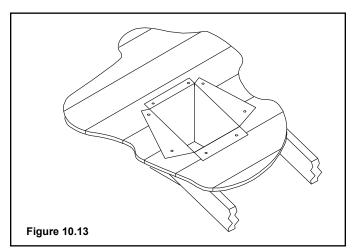
- Seal the gap between the vent pipe and firestop using silicone with a minimum of 300 °F continuous exposure rating to prevent cold air infiltration.
- Install the decorative ceiling thimble by sliding it up to the ceiling and attaching it using the provided screws.

A decorative cathedral ceiling support box can be installed on a cathedral ceiling through which the vent passes.

- 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.

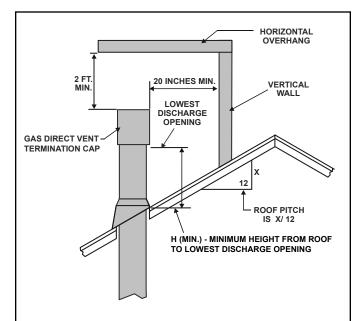
WARNING! Risk of Fire! Clean out ALL materials from inside the support box and complete the vertical vent run and termination.





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.



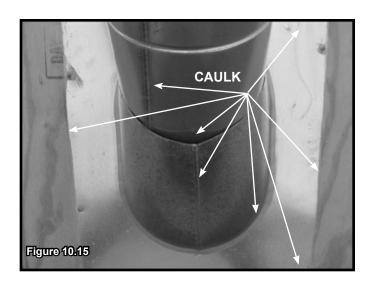
Roof Pitch	<u>H (Min.) Ft.</u>
Flat to 6/12	1.0*
Over 6/12 to 7/12	1.25*
Over 7/12 to 8/12	1.5*
Over 8/12 to 9/12	2.0*
Over 9/12 to 10/12	2.5*
Over 10/12 to 11/12	3.25
Over 11/12 to 12/12	4.0
Over 12/12 to 14/12	5.0
Over 14/12 to 16/12	6.0
Over 16/12 to 18/12	7.0
Over 18/12 to 20/12	7.5
Over 20/12 to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

* 3 foot minimum in snow regions

Figure 10.14 Minimum Height From Roof To Lowest Discharge Opening

NOTICE: Failure to properly caulk the roof flashing and pipe seams may permit entry of water.

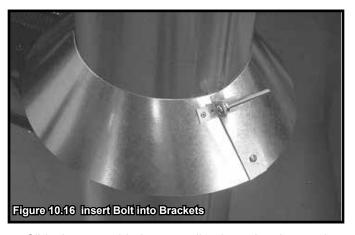
- Caulk the gap between the roof flashing and the outside diameter of the pipe.
- Caulk the perimeter of the flashing where it contacts the roof surface. See Figure 10.15.
- Caulk the overlap seam of any exposed pipe sections that are located above the roof line.



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.

- Slide the storm collar onto the exposed pipe section and align brackets.
- Insert a bolt (provided) through the brackets and install nut. Do not completely tighten.



- Slide the assembled storm collar down the pipe section until it rests on the roof flashing (see Figure 10.16).
- Tighten nut and make sure the collar is tight against the pipe section.
- Caulk around the top of the storm collar. See Figure 10.17.

I. Install Vertical Termination Cap

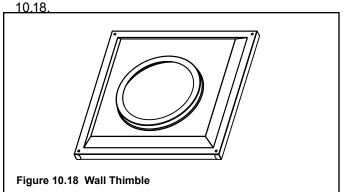
- Attach the vertical termination cap by sliding the inner collar of the cap into the inner flue of the pipe section while placing the outer collar of the cap over the outer flue of the pipe section.
- Secure the cap by driving three self-tapping screws (supplied) through the pilot holes in the outer collar of the cap into the outer flue of the pipe (see Figure 10.17).



J. Install Decorative Wall Components (SLP only)

A decorative wall thimble can be installed on 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 connecting the termination cap to the pipe.
- 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



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 10.19).
- 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 10.19.

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.

 $\textbf{Important Notice:} \ \ \text{Heat shields may } \underline{\text{not}} \ \text{be field constructed}.$

L. Install Horizontal Termination Cap (DVP and SLP Pipe)

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.

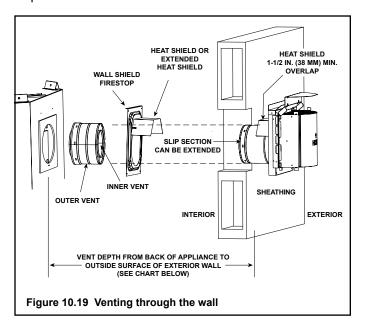
Failure to maintain overlap may cause overheating and fire

- 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.



Cap Specification Chart (depth without using additional pipe sections)

	DVP-TRAPK1	DVP-TRAP1	DVP-TRAPK2	DVP-TRAP2
	Top Vent	Rear Vent	Top Vent	Rear Vent
	<u>Depth</u>	<u>Depth</u>	<u>Depth</u>	<u>Depth</u>
	2-3/4 in. to	3-1/8 in. to	5-1/8 in. to	5-1/2 in. to
CD4236	4-5/8 in.	5 in.	9-1/8 in.	9-1/2 in.
CD4842				
Series	DVP-HPC1	DVP-HPC1	DVP-HPC2	DVP-HPC2
	Top Vent	Rear Vent	Top Vent	Rear Vent
	<u>Depth</u>	<u>Depth</u>	<u>Depth</u>	<u>Depth</u>
	2-3/4 in. to	3-1/8 in. to	4-7/8 in. to	5-1/4 in. to
1	4-7/8 in.	5-1/4 in.	9 in.	9-3/8 in.

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

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

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)

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 Z223.1 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.

A 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 223.1. Installation should be done by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter).

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

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

C. Gas Connection

- Refer to Reference Section 16 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 caulk with a minimum of 300 °F continuous exposure rating 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.

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™ Plus 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 110-120 VAC voltage cannot be shared within the same wall box.

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

B. IntelliFire™ Plus Ignition System Wiring

 Wire the appliance junction box to 110-120 VAC for proper operation of the appliance.

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

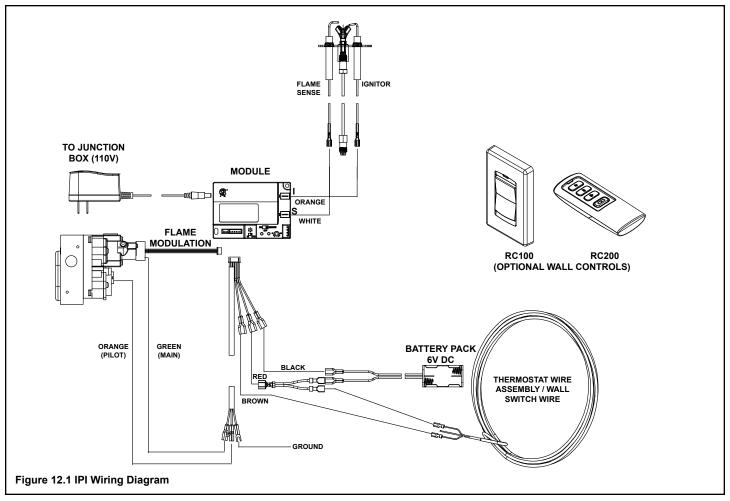
- · Refer to Figure 12.1, IPI Wiring Diagram.
- This appliance is equipped with an IntelliFire[™] Plus control valve which operates on a 6 volt system.
- Plug the 6 volt transformer plug into the appliance junction box to supply power to the unit OR install 4 AA cell batteries (not included) into the battery pack before use.

C. Optional Accessories Requirements

 This appliance may be used with a wall switch, wall mounted thermostat and/or a remote control.

Wiring for optional Hearth & Home Technologies approved accessories should be done now to avoid reconstruction. Follow instructions that come with those accessories.

 Hearth & Home Technologies recommends that IntelliFire[™] Plus wireless controls be used for their features and functionality with the IntelliFire[™] Plus ignition system.



D. Electrical Service and Repair

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

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

E. Junction Box Installation

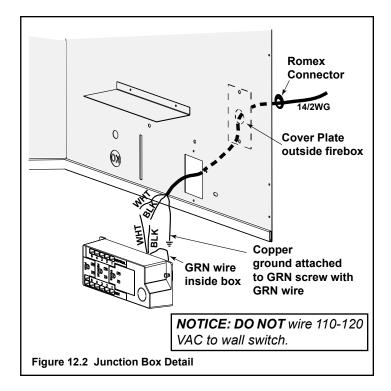
If the box is being wired from the **INSIDE** of the appliance:

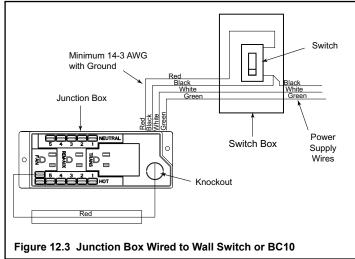
- Remove the screw attaching the junction box/receptacle to the outer shell, rotate the junction box inward to disengage it from the outer shell (see Figure 12.2).
- Pull the electrical wires from outside the appliance through the opening into the valve compartment and secure wires with a Romex connector. See Figure 12.2.
- Make all necessary wire connections to the junction box/receptacle and reattach the junction box/receptacle to the outer shell.

F. Wall Switch Installation for Fan (Optional)

If the box is being wired to a wall mounted switch for use with a fan (See Figure 12.3):

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



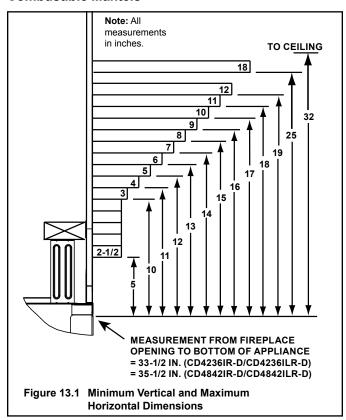


13 Finishing

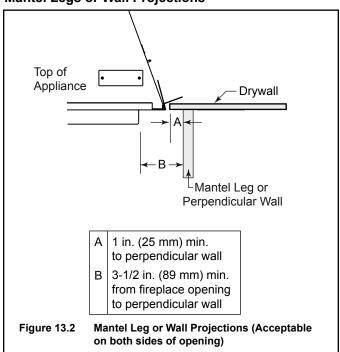
A. Mantel and Wall Projections

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

Combustible Mantels



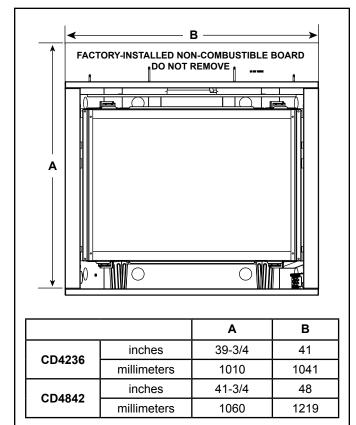
Mantel Legs or Wall Projections



B. Facing Material

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

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



Appliance Setup

A. Remove Fixed Glass Assembly

See Section 14.H.

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. Ember Placement

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

Place the Ember Material

See Figures 14.1 and 14.2. Place a small amount of 1/2 in. diameter pieces (dime-size) of ember material on the burner top. Be careful not to cover burner ports. It is not necessary to use the entire bag. Save the remaining amount for future use.

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

Ember material is shipped with this gas appliance. To place the ember material:

- Embers CANNOT be placed directly over ports. Care should be taken not to cover the lighting trail of ports (from back to front).
- Place dime-size pieces of Glowing Embers® just in front of the port trail, but not on or in between the ports (see Figure 14.2). Care should be taken so that the ports are not covered. Failure to follow this procedure will likely cause lighting and sooting problems.



Figure 14.1 Placement of Embers

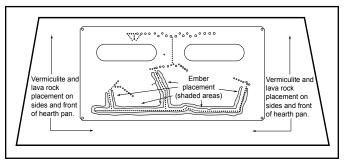


Figure 14.2 Placement of Embers

F. Place the Lava Rock and Vermiculite

See Figures 14.3 and 14.4. Lava rock should be evenly spread on firebox bottom, It is not necessary to use the entire bag. Save the remaining amount for future use.



Figure 14.3 Placement of Lava Rock

Spread vermiculite in a light, even pattern on top of lava rock. It is not necessary to use the entire bag. Save the remaining amount for future use.



Figure 14.4 Placement of Vermiculite

LOG PLACEMENT INSTRUCTIONS

G. Install the Log Assembly

Log Set Assembly: LOGS-4236, LOGS-4842 Models: CNXT4236IT-C/D, CNXT4842IT-C/D,

CNXT4236IH-C/D, CNXT4842IH-C/D

CD4236IR-C/D, CD4842IR-C/D

CAUTION: Logs are fragile, handle with care.

Log A: SRV2208-702 Log B: SRV2208-703 Log C: SRV2208-704

Log D: SRV2208-073 (4236 models) SRV2211-073 (4842 models)

Log E: SRV2208-705 Log F: SRV2208-706

- 1. Base logs B, C and D have been permanently mounted on the grate assembly. Do not attempt to remove or relocate the logs.
- 2. Log A placement (SRV2208-702): Install Log A as shown in Figure 2 and Figure 3. Locate log placement bracket and placement tabs shown in Figure 2. Align holes in bottom of log with alignment tabs. Place log down on log placement bracket and push back toward the rear of the firebox. See Figure 3.

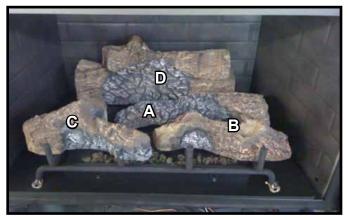


Figure 1. Base Logs

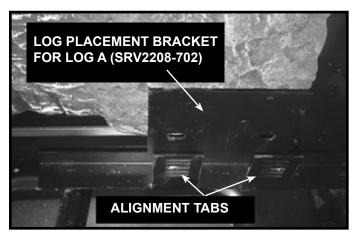


Figure 2.

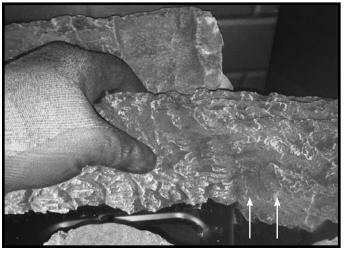


Figure 3.

- 3. Left log placement (SRV2208-705): Mate rear and front faces of left log with indentations on rear and base logs as shown in Figure 4 and Figure 5. Slide the left log back.
- 4. Right log placement (SRV2208-706): Place the right log by positioning the front "V" of the log on the indentation on the base log and resting the rear of the log on the flat area of the rear log. See Figure 4 and Figure 6.
- 5. Figure 6 shows the Left and Right Logs properly placed. Both Left and Right Logs should sit securely on the rear and corresponding base logs.

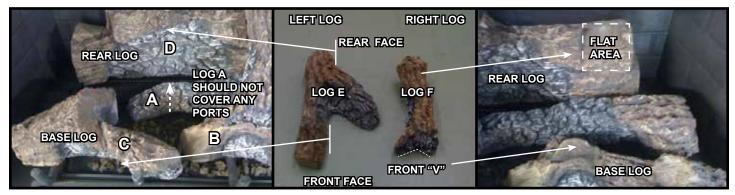


Figure 4. Left Log and Right Log Reference Points



Figure 5. Left Log in Proper Position



Figure 6. Left and Right Log in Proper Position

H. 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.

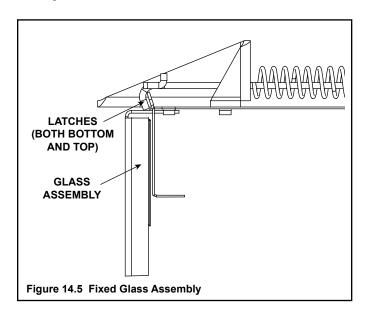
- DO NOT strike, slam or scratch glass.
- DO NOT operate fireplace with glass removed, cracked, broken or scratched.
- · Replace as a complete assembly.

Removing Fixed Glass Assembly

 Pull the four glass assembly latches out of the groove on the glass frame. Remove glass door from the appliance (see Figure 14.5).

Replacing Fixed Glass Assembly

 Replace the glass door on the appliance. Pull out and latch the four glass assembly latches into the groove on the glass frame.



I. Install Trim and/or Surround

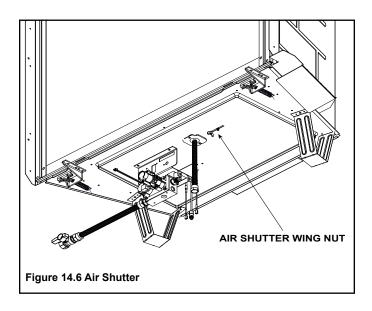
- Install optional trim kits and/or surrounds using the instructions included with the accessory.
- Use non-combustible materials to cover the gap between the sheet rock and the appliance (when applicable to the model).

J. Air Shutter Setting

Air shutter settings should be adjusted by a qualified service technician 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 14.6.

- Loosen the wing nut.
- Move the air handle to the right to open the air shutter.
- · Move the air handle to the left to close the air shutter.
- · Tighten the wing nut.

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



Air Shutter Settings

	NG	LP
CD4236IR-D	1/8 in.	5/8 in.
CD4842IR-D	5/16 in.	Fully Open

K. Refractory Color Review

Based on the installation of the appliance, the lighting may cause the back refractory panel to appear lighter than the side panels. In these rare cases, the recommended solution is to use the tested and approved aerosol touchup paint (TUP-GBK-12) to fog the back panels to match the side panels.

15 Troubleshooting

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

A. IntelliFire™ Plus Ignition System

Symptom	Possible Cause	Corrective Action			
Pilot won't light. The ignitor/module makes noise, but no	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.			
spark.	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 igniter and flame sense wires 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 .095 in. (2.41 mm) to .135 in. (3.43 mm).			
2. Pilot won't light, there is no noise or spark.	A. No power, transformer installed incorrectly, or depleted batteries.	Verify that transformer is installed and plugged into module. Check voltage of transformer at connection to module. Acceptable readings of a good transformer are between 6.4 and 6.6 volts DC. Battery power supply voltage must be at least 4 volts. If below 4 volts, replace batteries.			
	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 110-120 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.			
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 too large.	Verify gap of igniter to right side of pilot hood. The gap should be approximately .095 in. (2.41 mm) to .135 in. (3.43 mm).			
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance.			
	D. Pilot valve solenoid.	Verify that 1.5 to 1.8 VDC is supplied to pilot solenoid from module. If below 1.5 volts, replace module. If 1.5 volts or greater, replace valve.			

Troubleshooting (continued)

Symptom	Possible Cause	Corrective Action		
4. Pilot lights but continues to spark, and main burner will not ignite. (If the pilot continues	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 flame sense or igniter wires are not grounding out to metal chassis, pilot burner, pilot enclosure or screen if present, or any other metal object.		
to spark after the pilot flame has been lit, flame rectification has not occurred.)	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. With a multimeter, verify that current in series between module and sense lead is at least 0.14 microamps. Verify correct pilot orifice is installed and gas inlet is set to pressure specifications. Polish flame sensing rod with fine steel wool to remove any contaminants that may have accumulated on flame sensing rod.		
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance. Verify that wire harness is firmly connected to the module.		
	D. Damaged pilot assembly or contaminated flame sensing rod.	Verify that ceramic insulator around the flame sensing rod is not cracked, damaged, or loose. Verify connection from flame sensing rod to white sensor wire. Polish flame sensing rod with fine steel wool to remove any contaminants that may have accumulated on flame sensing rod. Verify continuity with a multi-meter 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.		

16 Reference Materials

A. Appliance/Decorative Front Dimension Diagrams

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

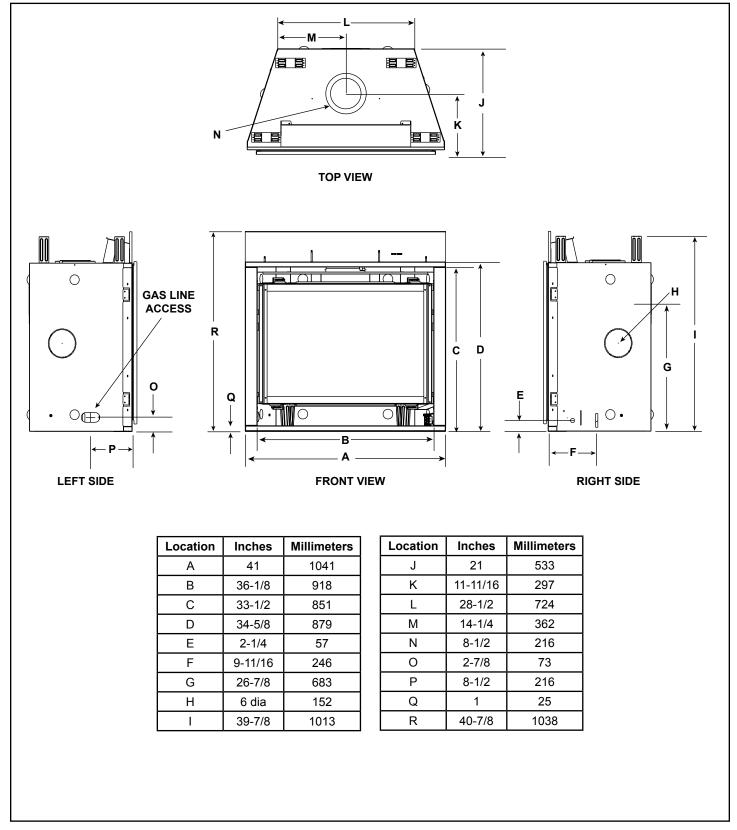
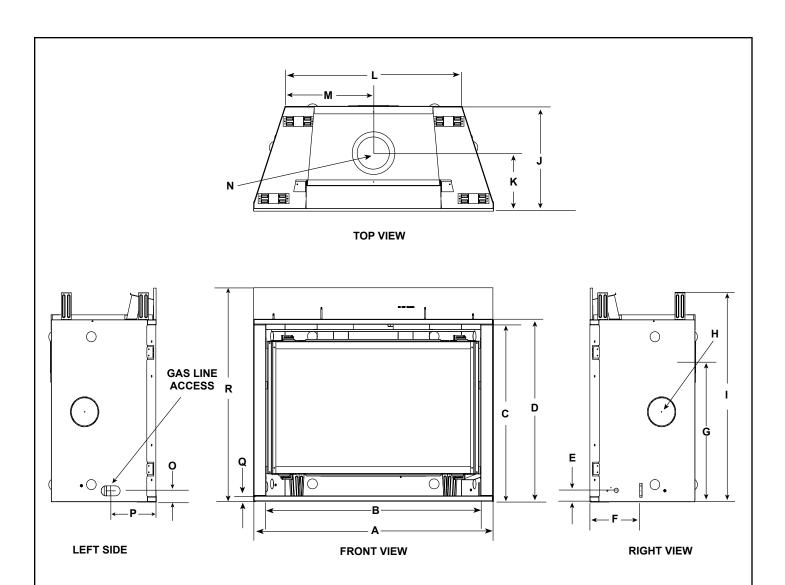


Figure 16.1 Appliance Dimensions CD4236IR-D and CD4236ILR-D Models

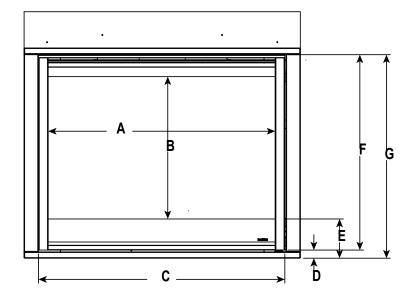


Location	Inches	Millimeters
Α	48	1219
В	43-1/8	1096
С	35-1/2	902
D	36-5/8	930
Е	2-3/8	60
F	9-15/16	252
G	28-7/8	734
Н	6	152
I	41-7/8	1064

Location	Inches	Millimeters
J	21	533
K	11-11/16	297
L	35-1/2	901
М	17-3/4	451
N	8-1/2	216
0	2-7/8	73
Р	8-1/2	216
Q	1	25
R	42-7/8	1089

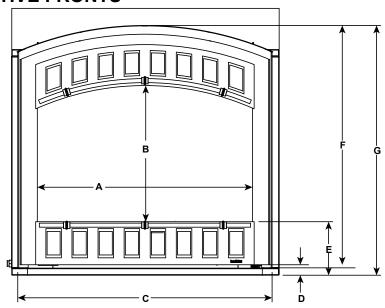
Figure 16.2 Appliance Dimensions CD4842IR-D and CD4842ILR-D Models

SIMON DECORATIVE FRONTS



			Α	В	С	D	E	F	G
SIM-36C CD-4236IR-D	CD 4226IB D	in.	32-7/16	22-13/16	35-13/16	1-7/16	6-13/16	32-1/16	33-7/16
	CD-4236IK-D	mm	824	579	910	37	173	814	33-7/16 849 35-3/8
SIM-42C CD-4842IR-D	in.	39-7/16	24-3/4	42-13/16	1-7/16	6-13/16	33-15/16	35-3/8	
	CD-4042IR-D	mm	1002	629	1087	37	173	862	899

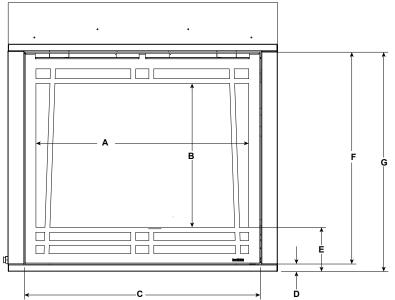
CONTOUR DECORATIVE FRONTS



			Α	В	С	D	E	F	G
CON-36C CD-4236IR-D	CD 4226IB D	in.	33	20-7/8	39	1-5/8	8-1/4	36-1/2	38-1/4
	CD-4236IK-D	mm	838	530	991	41	210	927	972
CON-42C CD-4842IR-D	in.	40	22-3/4	46	1-1/4	8	38-5/8	40	
	CD-4042IR-D	mm	1016	578	1168	32	203	981	1016

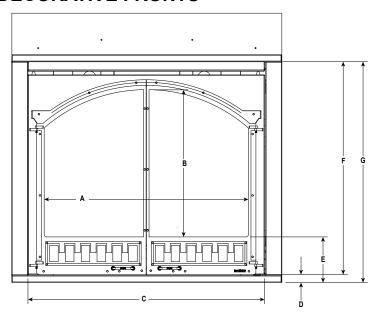
Figure 16.3 Decorative Front dimensions - Simon and Countour

CRAFTSMAN DECORATIVE FRONTS



			Α	В	С	D	E	F	G
CRAFT-36C	CD-4236IR-D	in.	32-3/8	21-7/8	35-15/16	1-3/16	6-3/4	32-1/4	33-3/8
	CD-4236IK-D	mm	822	556	913	30	172	819	848
CRAFT-42C CD-4842IR-D	in.	39-5/16	23-13/16	42-13/16	1-3/16	6-3/4	34-1/8	35-5/16	
	CD-4042IR-D	mm	999	605	1087	30	172	867	897

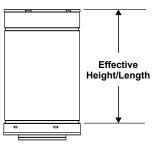
JAMESTOWN DECORATIVE FRONTS



			Α	В	С	D	E	F	G
JAMES-36C	CD-4236IR-D	in.	31-1/16	22-3/8	35-15/16	1-1/4	6-15/16	32-3/8	33-9/16
		mm	789	568	889	32	176	822	853
JAMES-42C	CD-4842IR-D	in.	37-15/16	24-9/16	42-7/8	1-1/4	6-15/16	34-1/4	35-1/2
		mm	964	624	1089	32	176	870	902

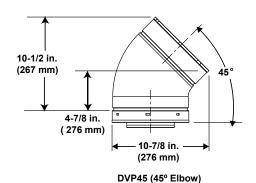
Figure 16.4 Decorative Front Dimensions - Craftsman and Jamestown

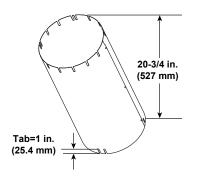
B. Vent Components Diagrams



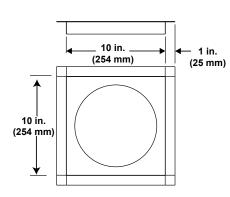
DVP Pipe (see chart)

Pipe	Effective Length				
i ipc	Inches	Millimeters			
DVP4	4	102			
DVP6	6	152			
DVP12	12	305			
DVP24	24	610			
DVP36	36	914			
DVP48	48	1219			
DVP6A	3 to 6	76 to 152			
DVP12A	3 to 12	76 to 305			

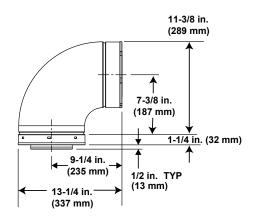




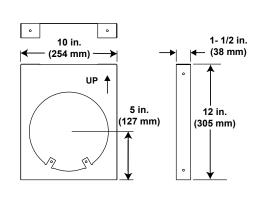
Finished Height: 19-3/4 in./502 mm UNIV-AS2 (Attic Insulation Shield)



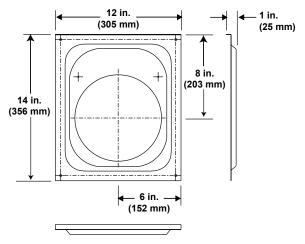
DVP-FS (Ceiling Firestop)



DVP90ST (90° Elbow)



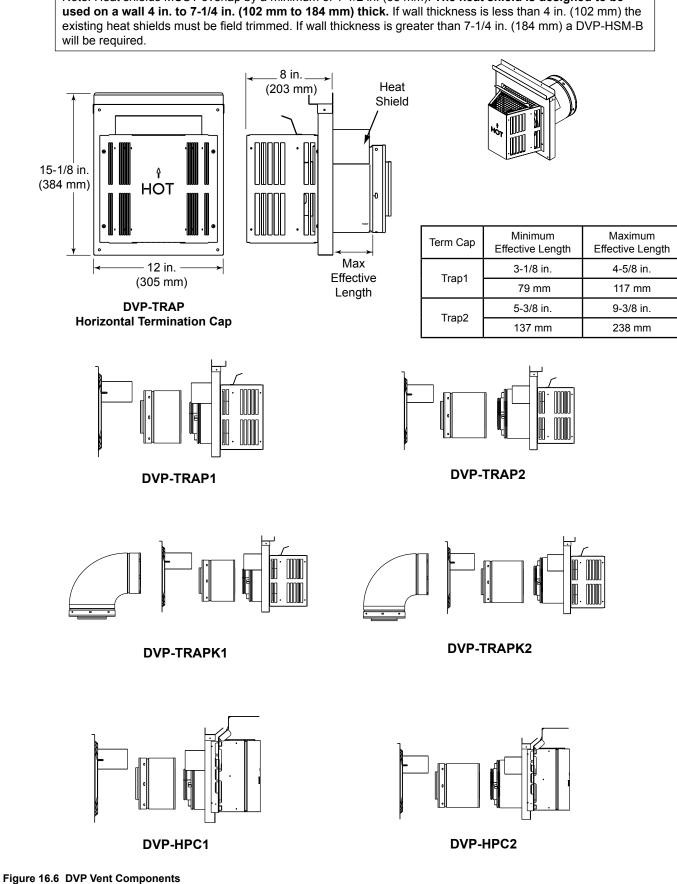
DVP-HVS (Vent Support)

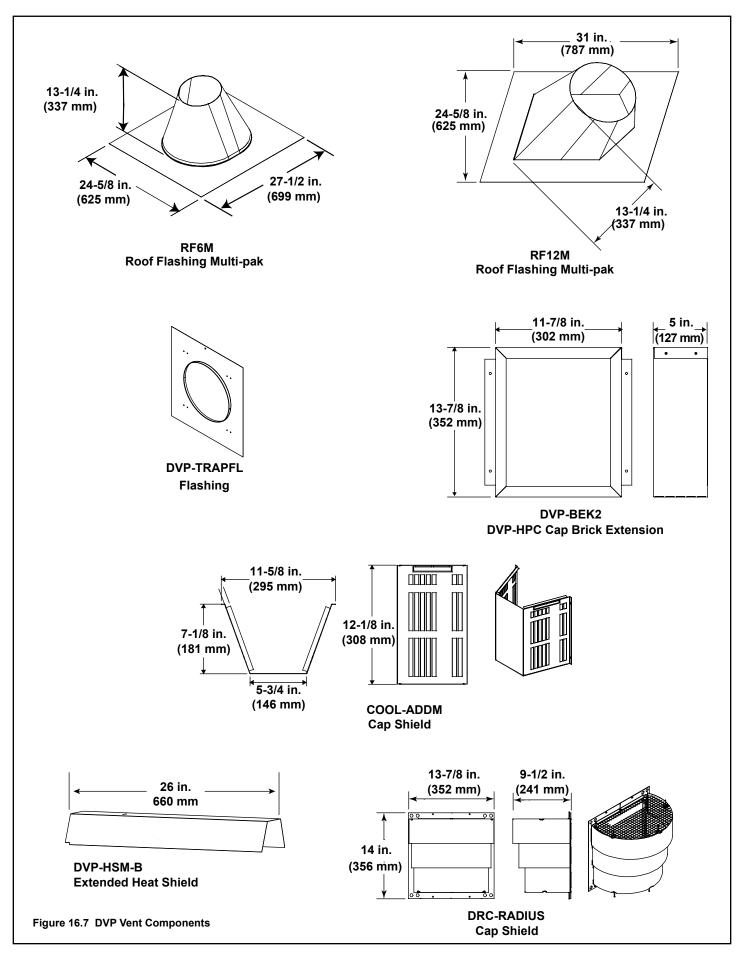


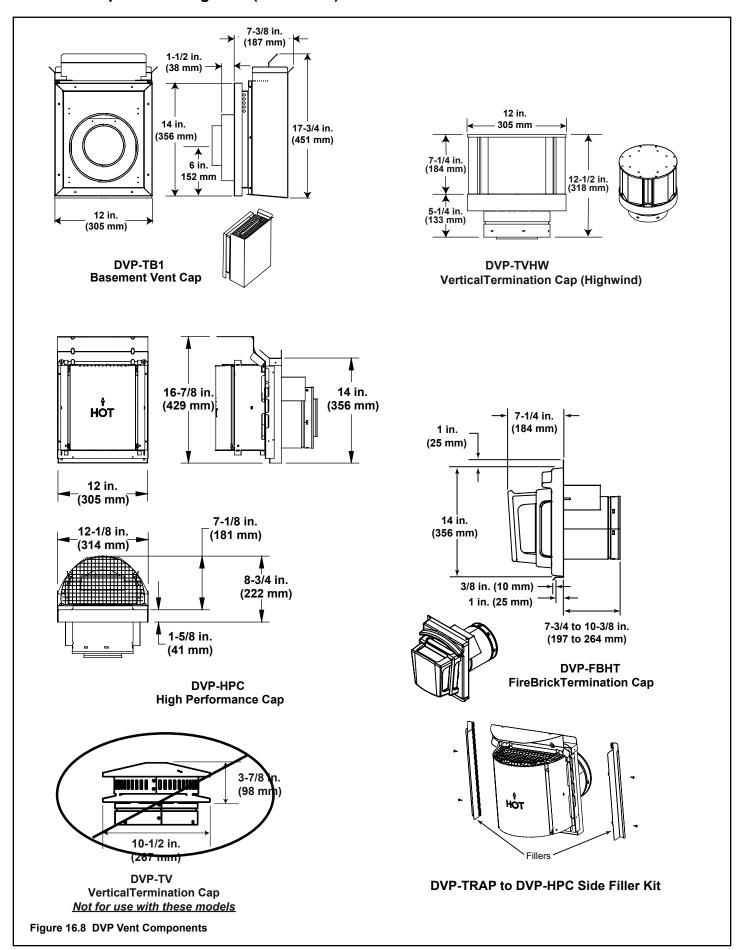
DVP-WS (Wall Shield Firestop)

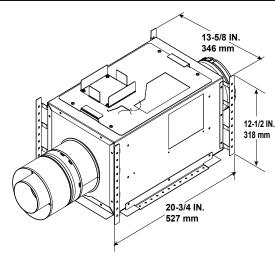
Figure 16.5 DVP Vent Components

Note: Heat shields MUST overlap by a minimum of 1-1/2 in. (38 mm). The heat shield is designed to be







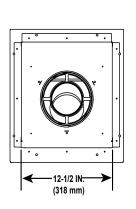


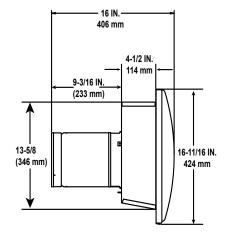
Optional Wire Harness					
DESCRIPTION	PART NUMBER				
10 ft. PV Wire Harness	PVI-WH10				
20 ft. PV Wire Harness	PVI-WH20				
40 ft. PV Wire Harness	PVI-WH40				
60 ft. PV Wire Harness	PVI-WH60				
80 ft. PV Wire Harness	PVI-WH80				
100 ft. PV Wire Harness	PVI-WH100				

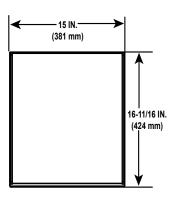
PVI-SLP-B Power Vent Inline

Note: Wire harnesses required to power the PVI-SLP-B connect to the appliance and are ordered separately from PVI-SLP-B. Contact your dealer to order.

Note: The PVI-SLP-B requires a PV-IPI-CK be installed on this appliance. The PV-IPI-CK is ordered separately from the PVI-SLP-B. Contact your dealer to order.

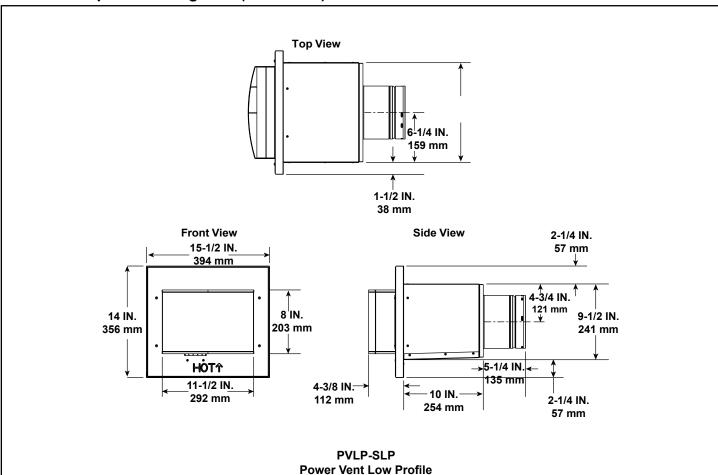






SLP-LPC
SLP Low Profile Cap
(Approved for use with PVI-SLP-B only)

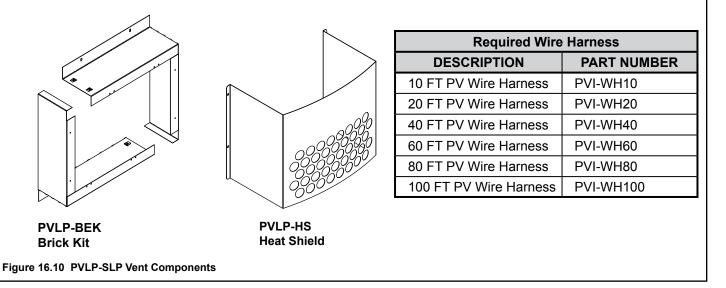
Figure 16.9 DVP Vent Components

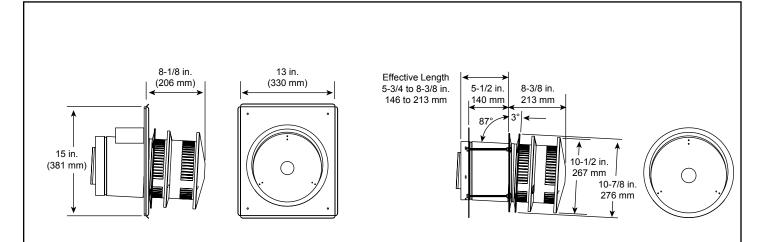


Note: Wire harnesses required to power the PVLP-SLP connect to the appliance and are ordered separately from PVLP-SLP. Contact your dealer to order.

Note: A PVLP-HS heat shield is available and sold separately. Use if the PVLP-SLP is installed in a high traffic area.

Note: The PVLP-SLP requires a PV-IPI-CK be installed on this appliance. The PV-IPI-CK is ordered separately from the PVLP-SLP. Contact your dealer to order.





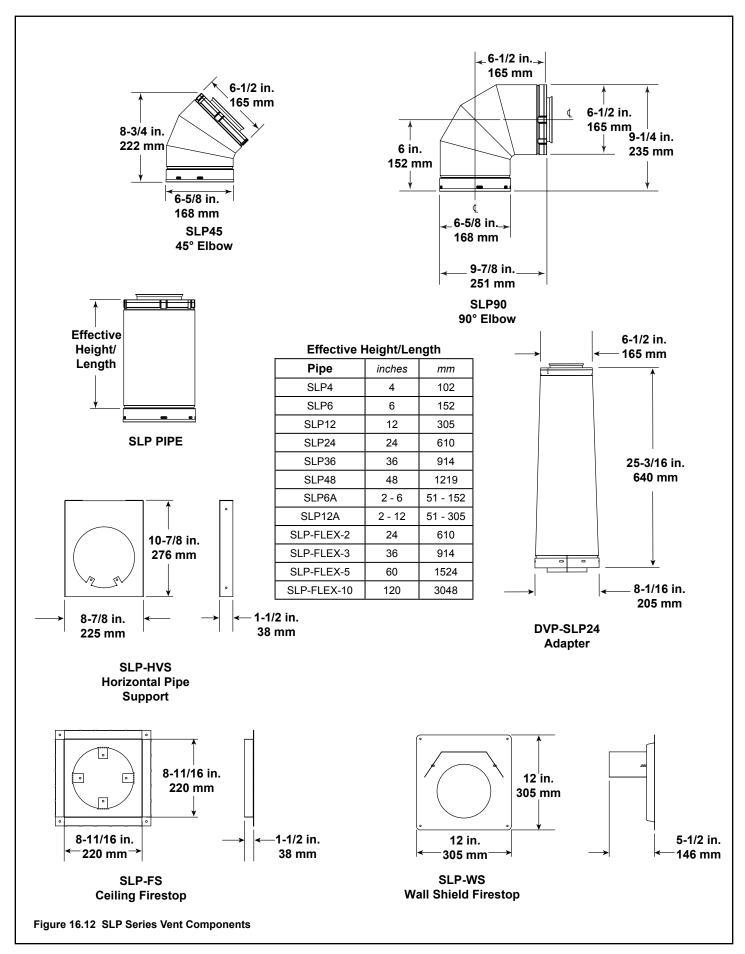
A WARNING

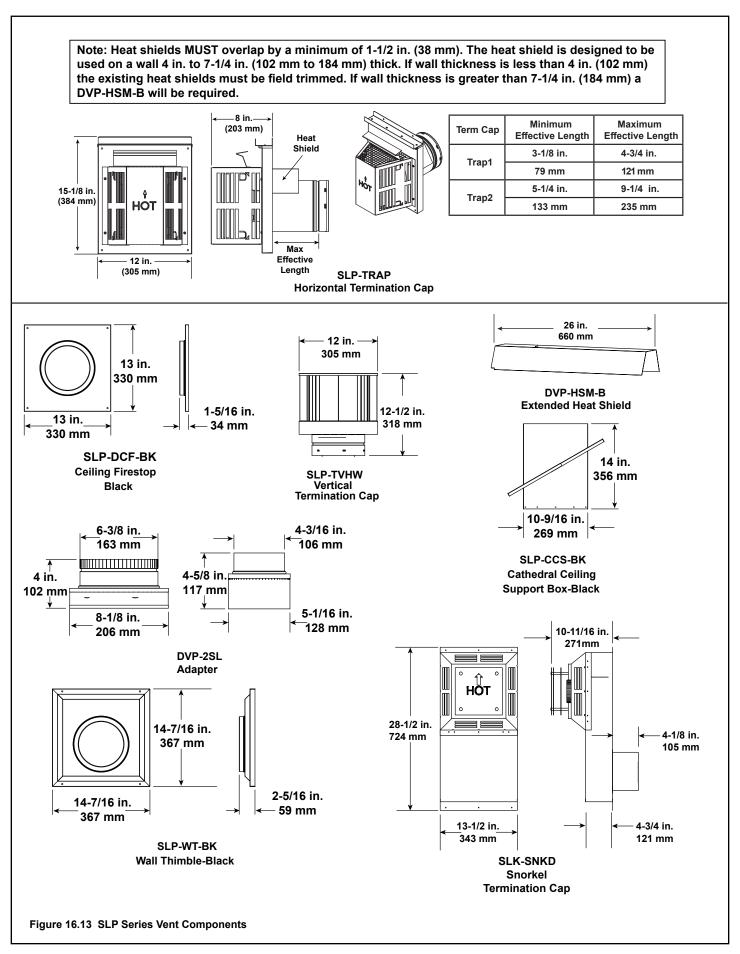


Fire Risk.

 When using DVP-HRC-SS and DVP-HRC-ZC-SS termination cap on top vented fireplaces, a 6 inch minimum vertical vent section is required before installing first elbow.

DVP-HRC-SS DVP-HRC-ZC-SS HORIZONTAL TERMINATION CAP



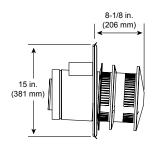


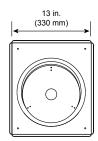
A WARNING

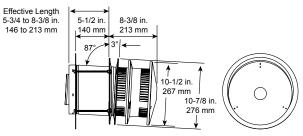


Fire Risk.

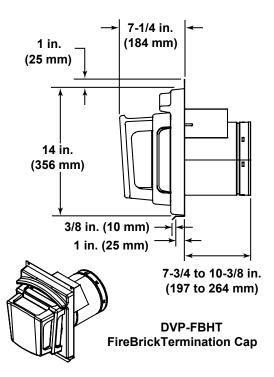
- When using SLP-HRC-SS and SLP-HRC-ZC-SS termination cap on top vented fireplaces, a one foot minimum vertical vent section is required before installing first elbow.
- When using DVP-TB1 termination cap on top vented fireplaces, a three foot minimum vertical vent section is required before installing first elbow.

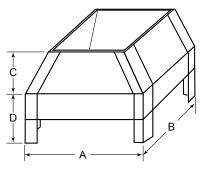






SLP-HRC-SS HORIZONTAL TERMINATION CAP





LDS33/LDS46 Decorative Shroud

	Α		В		С		D	
Catalog #	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

Figure 16.14 Vent Components

D. Contact Information



Heatilator, a brand of Hearth & Home Technologies 7571 215th Street West, Lakeville, MN 55044 www.heatilator.com

Please contact your Heatilator dealer with any questions or concerns.

For the location of your nearest Heatilator dealer,

please visit www.heatilator.com.

- NOTES -



NOTICE

DO NOT DISCARD THIS MANUAL

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



This product may be covered by one or more of the following patents: (United States) 5613487, 5647340, 5890485, 5941237, 6006743, 6019099, 6053165, 6145502, 6374822, 6484712, 6601579, 6769426, 6863064, 7077122, 7098269, 7258116, 7470729, 8147240 or other U.S. and foreign patents pending.

2000-945C