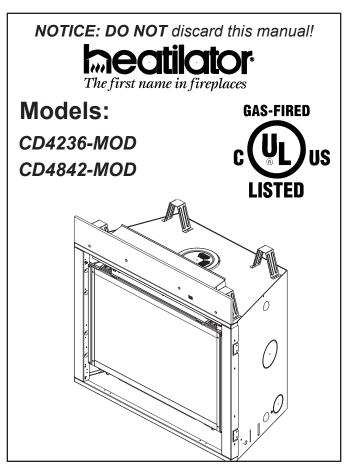
Installation Manual

Installation and Appliance Setup

INSTALLER: Leave this manual with party responsible for use and operation.

OWNER: Retain this manual for future reference.



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.

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.

warning:

FIRE OR EXPLOSION HAZARD Failure to follow safety warnings exactly could result in serious injury, death, or

property damage.
 DO NOT store or use gasoline or other flammable vapors and liquids in the vicinity of this

• What to do if you smell gas

or any other appliance.

- **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.



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.

▲ Safety Alert Key:

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

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ATTENTION INSTALLER:

Follow this Standard Work Checklist

installation manual. Customer: Lot/Address: Model (circle one):	CD4236-MOD, CD4842-MOD	Date Installed: Location of Fireplace: Installer: Dealer/Distributor Pho Serial #:	one #
	! Risk of Fire or Explosion! Failure to ir re or explosion.	stall appliance accord	ling to these instructions could
Required non-combo Verified clearances t	sections 3 and 6 se is insulated and sealed. (Pg. 12) ustible board is installed. o combustibles. (Pg. 11-12) and secured. (Pg. 26)	YES I	F NO, WHY?
Venting installed, loc Firestops installed. Attic insulation shield Exterior wall/Roof fla	n complies to vent diagrams. (Pg. 13-22) ked and secured in place with proper cleara (Section 5)	nce.	
Electrical Section Unswitched power (Switch wires properl	110-120 VAC) provided to the appliance.		
	fuel type.		
Verified all clearance	10 (Pg. 37-38) als not installed in non-combustible areas. as meet installation manual requirements. applications comply with installation manual requirements.	uirements.	
All packaging and pro Refractories, logs, m Glass assembly inst Accessories installed Mesh, doors, or deco Manual bag and all of the appliance and			
 Photographing the 	thnologies recommends the following: installation and copying this checklist for yo remain visible at all times on the appliance of		mplete.
	description of the issues, who is responsible		er Trades, etc) and corrective
Comments Commun	nicated to party responsible	by	on
(Date)		(Builder / Gen. (Contractor/) (Installer) 2241-903 Rev. B 10/

→ = Contains updated information.



Product Specific and Important Safety Information

A. Appliance Certification

MODELS: CD4236-MOD, CD4842-MOD

LABORATORY: Underwriters Laboratories, Inc. (UL)

TYPE: Direct Vented Gas Fireplace

STANDARD: ANSI Z21.50-2014 • CSA 2.22-2014

This product is listed to ANSI standards for "Vented Gas Fireplace 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. Glass Specifications (Tempered)

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

1	dels Canada)	Maximum Input BTU/h	Minimum Input BTU/h	Orifice Size (DMS)
CD4236-MOD	US (0-2000 FT)	28,000	19,000	40
(NG)	CANADA (2000-4500 FT)	25,200	17,100	41
CD4236-MOD	US (0-2000 FT)	20,000	14,000	55
(LP)	CANADA (2000-4500 FT)	18,000	12,000	56
CD4842-MOD	US (0-2000 FT)	32,000	22,000	35
(NG)	CANADA (2000-4500 FT)	28,800	19,800	36
CD4842-MOD	US (0-2000 FT)	22,000	15,000	54
(LP)	CANADA (2000-4500 FT)	20,000	14,000	55

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 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.

Getting Started

A. 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.



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



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.

B. Tools and Supplies Needed

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

Tape measure Framing material

Pliers Hammer Phillips screwdriver Manometer Gloves Framing square

Voltmeter Electric drill and bits (1/4 in.)

Plumb line Safety glasses Level Reciprocating saw

Flat blade screwdriver

Non-corrosive leak check solution

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

Caulking material (300 °F minimum continuous exposure

One 1/4 in. female connection (for optional fan).

C. Inspect Appliance and Components

- · Carefully remove the appliance and components from the packaging.
- The vent system components and decorative fronts may be shipped in separate packages.
- · Media 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 media 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.

A. Appliance/Decorative Front Dimension Diagrams

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

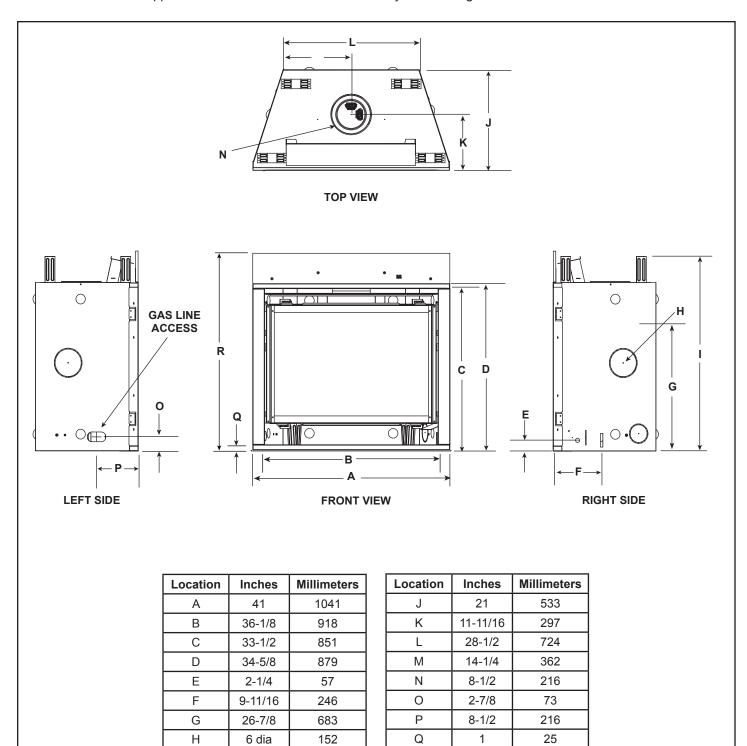


Figure 3 '	1 Annliance	Dimoneione	- CD4236-MOD

39-7/8

1013

40-7/8

1038

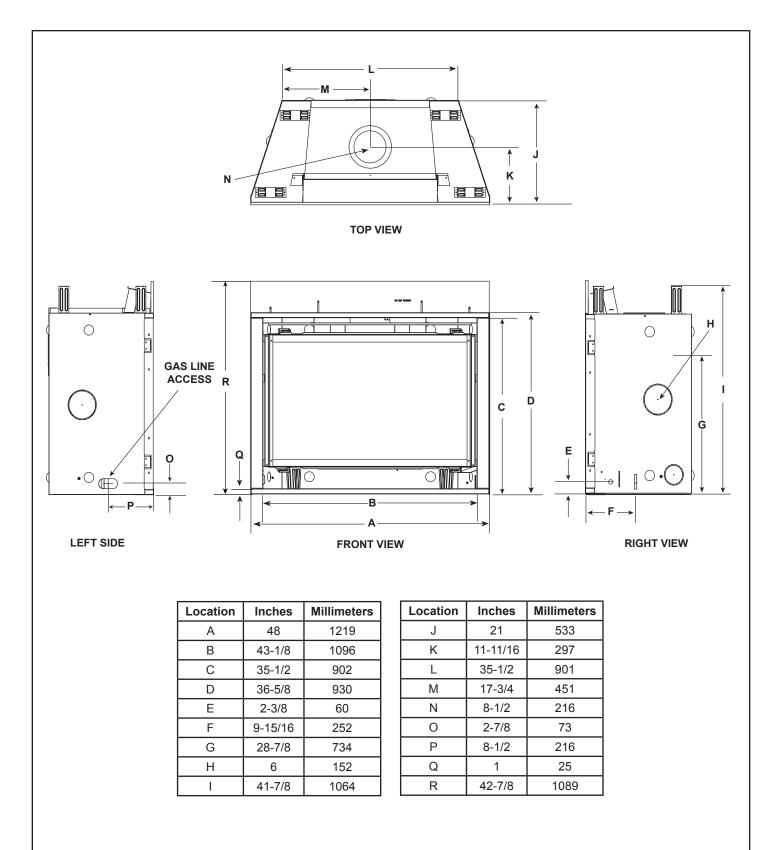


Figure 3.2 Appliance Dimensions - CD4842-MOD

Decorative Front Dimension

SIMON DECORATIVE FRONTS

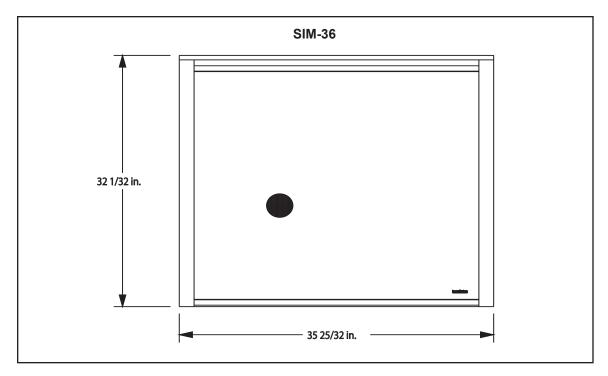


Figure 3.3 SIM-36 Simon Decorative Front Dimensions

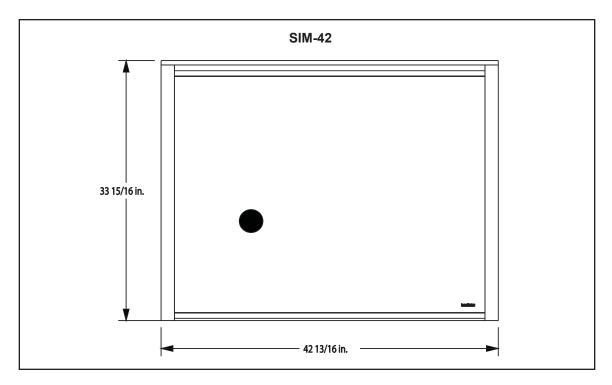


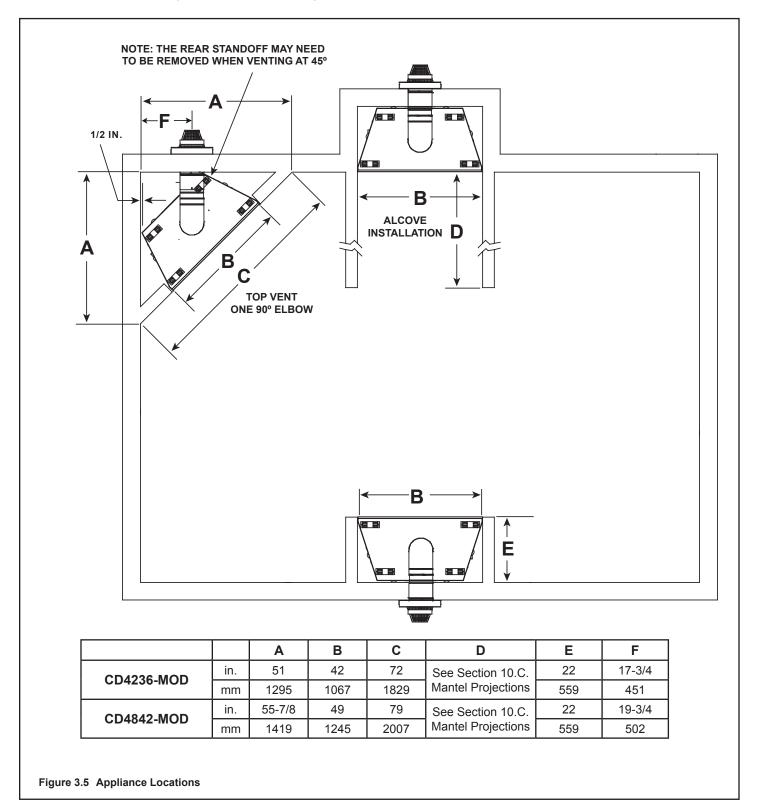
Figure 3.4 SIM-42 Simon Decorative Front Dimensions

B. Clearances to Combustibles

When selecting a location for the appliance it is important to consider the required clearances to walls (see Figure 3.5).

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.



C. 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.

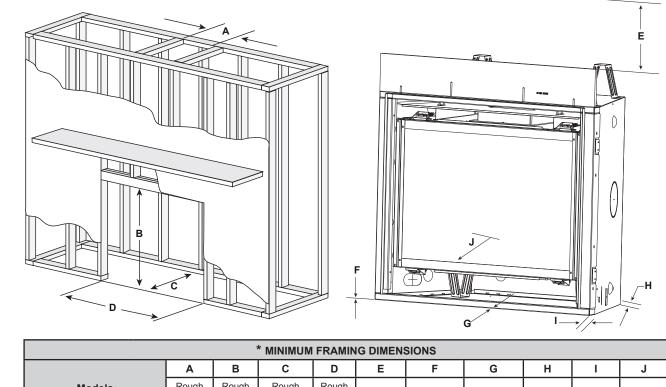
Walls, ceiling, base plate and cantilever floor of the chase should be insulated. Vapor and air infiltration barriers should be installed in the chase as per regional codes for the rest of the home. Additionally, in regions where cold air infiltration may be an issue, the inside surfaces may be sheetrocked and taped (or an equivalent method may be used) to achieve 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.

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.



* MINIMUM FRAMING DIMENSIONS											
		Α	В	С	D	E	F	G	Н	I	J
Models		Rough Opening (Width)	Rough Opening (Height)	Rough Opening (Depth)	Rough Opening (Width)	Clearance to Ceiling	Combustible Floor	Combustible Flooring	Behind Appliance	Sides of Appliance	Front of Appliance
CD4236-MOD	in.	10	40-1/8	22	42	25	0	0	1/2	1/2	36
	mm	254	1019	559	1067	635	0	0	13	13	914
CD4842-MOD	in.	10	42-1/8	22	49	25	0	0	1/2	1/2	36
CD4042-IVIOD	mm	254	1070	559	1245	635	0	0	13	13	914

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

Figure 3.6 Clearances to Combustibles



Termination Location and Vent Information

A. Vent Termination Minimum Clearances



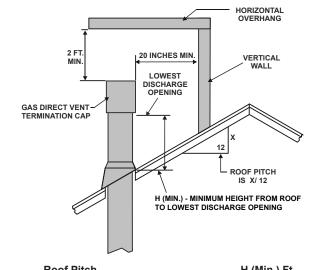
A WARNING

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 could cause overheating and fire.



Roof Pitch	H (Min.) Ft.
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 4.1 Minimum Height From Roof to Lowest Discharge Opening

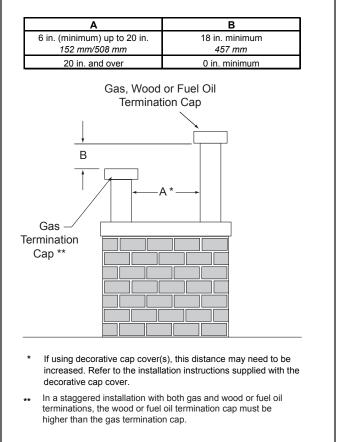
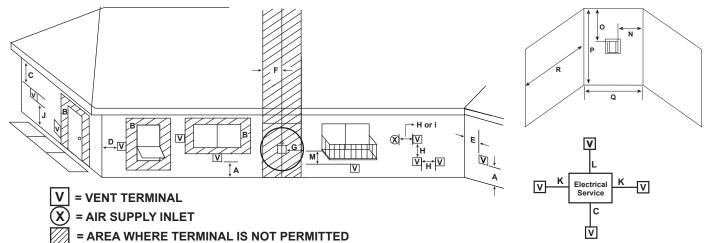


Figure 4.2 Staggered Termination Caps

B. Chimney Diagram



		/// - AILA WIILI	L ILIXIIIIAL IO NOI I LIXIIII ILD
Α	=		clearances above grade, veranda, porch, deck or balcony
В	=		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
			clearance below vinyl soffits and electrical service
D	=	9 inches	clearance to outside corner
Ε	=	6 inches	clearance to inside corner
F	=	, ,	not to be installed above a gas meter/regulator assembly within 3 feet horizontally from the center-line of the regulator
G	=		clearance to gas service regulator vent outlet

inlet or direct-vent termination = 3 ft. (U.S.A.) 6 ft. (Canada).....clearance to a mechanical (powered) air supply inlet

12 inches (Canada).clearance to non-mechanical (unpow-

ered) air supply inlet, combustion air

= 9 inches (U.S.A)

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

= 7 ft...... On **public** 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
		n of the vent termination must not interfere with access to the al service.

М	=	18 inches	clearance under veranda, porch, deck,
			balcony or overhang

42 inchesvinyl or composite overhang Permitted when veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor.

Figure 4.3 Minimum Clearances for Termination

Covered	Alcovo	Applications	
Covereu	AICOVE	Applications	

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

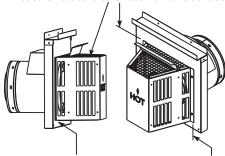
Ν	= 6 inches	non-vinyl sidewalls
	40 :	and the state of t

12 inches vinyl sidewalls = 18 inches non-vinyl soffit and overhang 42 inches vinyl soffit and overhang

= 8 ft

	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.

C. Approved Pipe

This appliance is approved for use with Hearth & Home Technologies DVP or SLP venting systems. Refer to Section 12.A for vent component information and dimensions.

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.

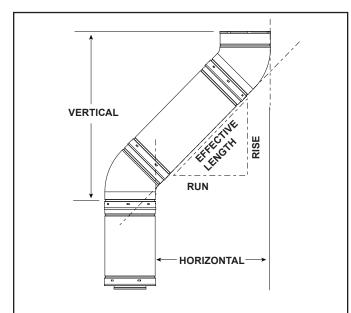
WARNING! Risk of Fire or Asphyxiation. This appliance requires a separate vent. **DO NOT** vent to a pipe serving a separate solid fuel burning appliance.

D. 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 4.4.

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 4.4.

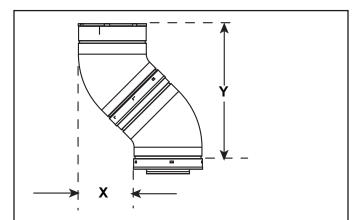
Figure 4.5 shows the vertical and horizontal offsets for DVP or SLP elbows.



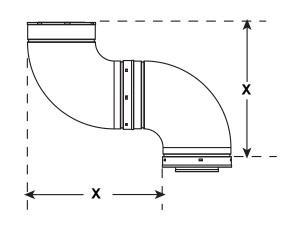
SLP	Effective Length		Rise/Run	/Run
Pipe	Inches	Millimeters	Inches	Millimeters
SLP4	4	102	2-3/4	70
SLP6	6	152	4-1/4	108
SLP12	12	305	8-1/2	216
SLP24	24	610	17	432
SLP36	36	914	25-1/2	648
SLP48	48	1219	34	864
SLP6A	3 to 6	76 to 152	2-1/8-4-1/4	54-108
SLP12A	3 to 12	76 to 305	2-1/8-8-1/2	54-216

DVP	Effective Length		Rise	/Run
Pipe	Inches	Millimeters	Inches	Millimeters
DVP4	4	102	2-3/4	70
DVP6	6	152	4-1/4	108
DVP12	12	305	8-1/2	216
DVP24	24	610	17	432
DVP36	36	914	25-1/2	648
DVP48	48	1219	34	864
DVP6A	3 to 6	76 to 152	2-1/8-4-1/4	54-108
DVP12A	3 to 12	76 to 305	2-1/8-8-1/2	54-216

Figure 4.4



Vent	Х			Υ
Type	Inches	Millimeters	Inches	Millimeters
DVP	4-1/2	114	17	432
SLP	5	127	11-3/4	298



Vent Type	Х	
vent Type	Inches	Millimeters
DVP	16-1/4	413
SLP	11-1/4	286

Figure 4.5 Vertical and Horizontal Offset for DVP and SLP Elbows

E. 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 Section 12.A (Figure 12.1 for DVP, Figure 12.6 for SLP) for information on effective length of pipe components.
- Horizontal terminations are measured to the outside mounting surface (flange of termination cap) (see Figure 4.3).
- Vertical terminations are measured to bottom of termination cap.
- Horizontal pipe installed level with no rise.

F. Vent Diagrams

General Rules:

- SUBTRACT 3 ft. from the total H measurement for each 90° elbow installed horizontally.
- SUBTRACT 1-1/2 ft. from the total H measurement for each 45° elbow installed horizontally.
- A maximum of three 90° elbows (or six 45° elbows) may be used in any vent configuration. Some elbows may be installed horizontally. See Figure 4.15.
- When penetrating a combustible wall, a wall shield firestop must be installed.
- When penetrating a combustible ceiling, a ceiling firestop must be installed.
- Horizontal runs of vent do not require vertical rise; horizontal runs may be level.
- Horizontal termination cap should have a 1/4 inch downward slant to allow any moisture in cap to be released. See Figure 4.6.

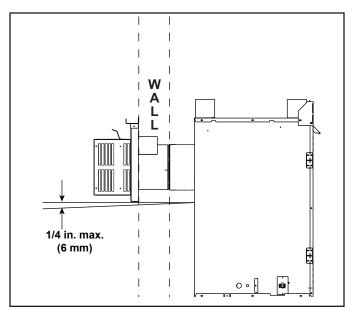


Figure 4.6

Top Vent - Horizontal Termination

Note: The CD4236-MOD, CD4842-MOD 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.

- ALWAYS maintain specified clearances around venting and firestop systems.
- 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

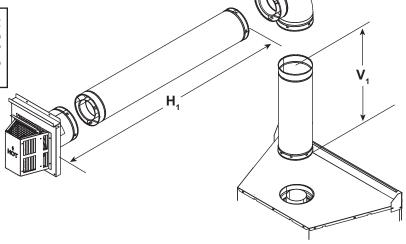
CD4236-MOD			
V₁ Minimum		H₁ Max	kimum
Elbo	w only	2 ft	610 mm
6 in.	152 mm	4 ft.	1.2 m
1 ft.	305 mm	6 ft.	1.8 m
1-1/2 ft.	457 mm	10 ft.	3.0 m
2 ft.	610 m	15 ft.	4.6 m
2-1/2 ft.	762 mm	18 ft.	5.5 m
3 ft.	914 mm	20 ft.	6.1 m

 $V_1 + H_1 = 40 \text{ ft. } (12.2 \text{ m}) \text{ Maximum}$ $H_1 = 20 \text{ ft. } (6.1 \text{ m}) \text{ Maximum}$

CD4842-MOD			
nimum	H ₁ Max	kimum	
w Only	2 ft.	610 mm	
305 mm	3 ft.	914 mm	
610 mm	6 ft.	1.8 m	
914 mm	11 ft.	3.4 m	
1.2 m	20 ft.	6.1 m	
	nimum w Only 305 mm 610 mm 914 mm	nimum H₁ Max w Only 2 ft. 305 mm 3 ft. 610 mm 6 ft. 914 mm 11 ft.	

 $V_1 + H_1 = 40 \text{ ft. } (12.2 \text{ m}) \text{ Maximum}$ $H_1 = 20 \text{ ft. } (6.1 \text{ m}) \text{ Maximum}$

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.



Two Elbows

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.

CD4236-MOD				
V₁ Minimum		H ₁ + H ₂ N	/laximum	
Elbov	v only	Not a	llowed	
6 in.	152 mm	2 ft.	610 mm	
1 ft.	305 mm	4 ft.	1.2 m	
1-1/2 ft. 457 mm		11 ft.	3.4 m	
2 ft.	610 mm	17 ft.	5.2 m	
2-1/2 ft. 762 mm		20 ft.	6.1 m	
V + H	+ H = 40 ft	V + H + H = 40 ft (12.2 m) Maximum		

 $V_1 + H_1 + H_2 = 40 \text{ ft. (12.2 m)}$ Maximum $H_1 + H_2 = 20 \text{ ft. (6.1 m)}$ Maximum $V_1 = 1 \text{ ft. (305 mm)}$ Minimum

CD4842-MOD			
V₁ Mir	V ₁ Minimum		/laximum
Elbov	w only	Not a	llowed
6 in.	152 mm	Not a	llowed
1 ft.	305 mm	2 ft.	610 mm
2 ft.	610 mm	4 ft.	1.2 m
3 ft.	914 mm	6 ft.	1.8 m
4 ft.	1.2 m	8 ft.	2.4 m
6 ft.	1.8 m	12 ft.	3.6 m
10 ft.	3.0	20 ft.	6.1 m

 $V_1 + H_1 + H_2 = 40 \text{ ft. } (12.2 \text{ m}) \text{ Maximum}$ $H_1 + H_2 = 20 \text{ ft. } (6.0 \text{ m}) \text{ Maximum}$ $V_1 = 1 \text{ ft. } (305 \text{ mm}) \text{ Minimum}$

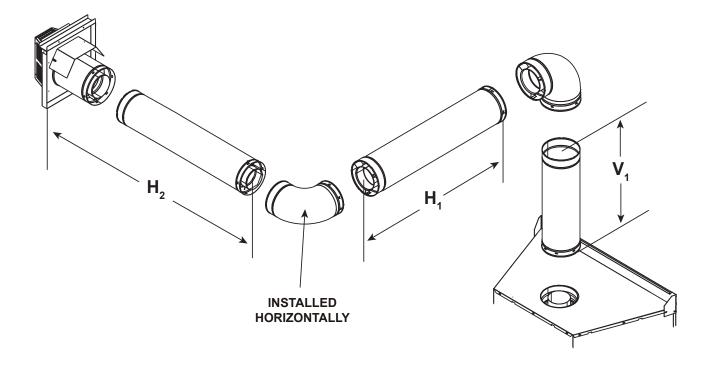
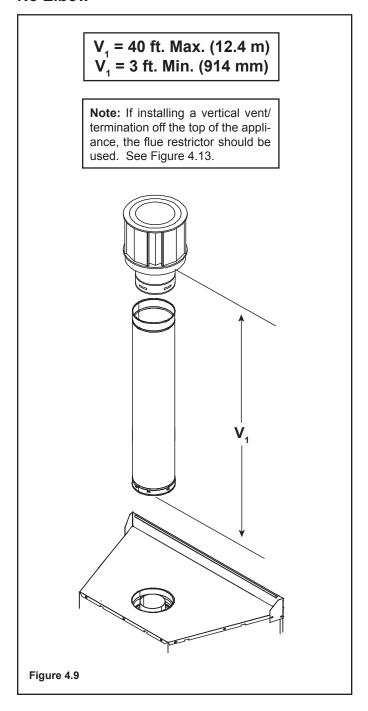


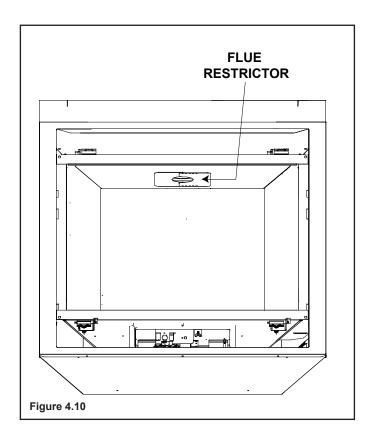
Figure 4.8

No Elbow

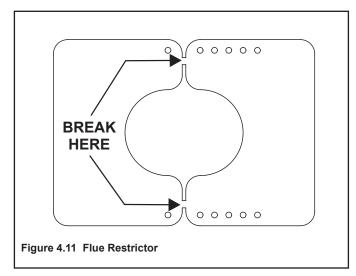


Flue Restrictor Instructions

1. Install flue restrictor as shown below.



2. Break the flue restrictor into two pieces. Do this by bending the part back and forth until it breaks (see Figure 4.11).



Top Vent - Vertical Termination (continued)

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 4.12).

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

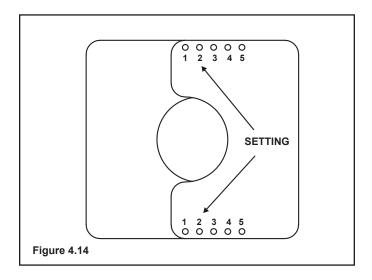
Figure 4.12

Note: If the DVP-2SL or DVP-SLP24 adapter is used with SLP pipe, you MUST subtract one number from the table above.

Example: Top vent 40 ft vertical with DVP pipe = 4-4

Top vent 40 ft vertical with SLP pipe = 3-3

- 4. Center the Flue Restrictor on vent and secure in place by using two self-tapping screws (see Figure 4.14).
- 5. Reinstall the Exhaust Shield.



Two Elbows

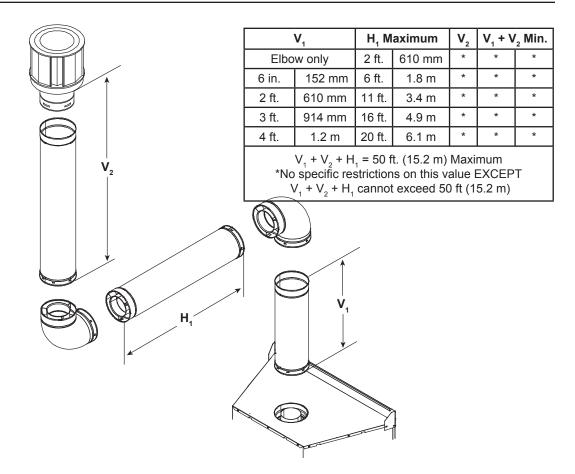
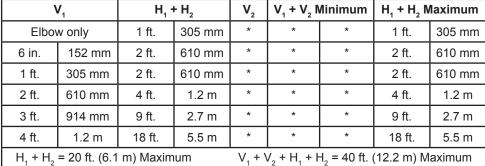


Figure 4.13

Three Elbows



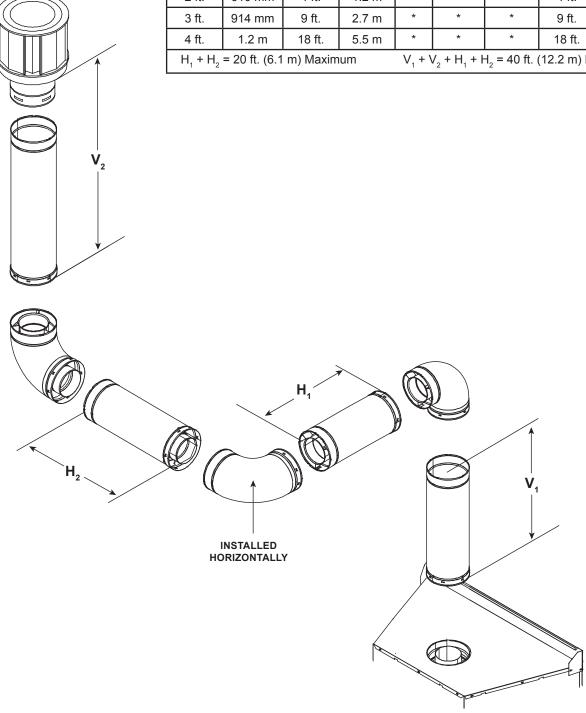


Figure 4.15

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:

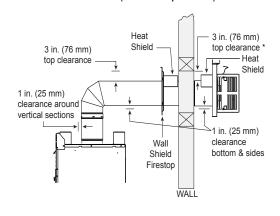
- Between ceiling firestops.
- Between wall shield firestops.
- · Around vent system.

Failure to keep insulation or other material away from vent pipe could cause overheating 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
- 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)



When using SLP pipe, minimum clearances from the vent pipe to combustible materials at inside wall firestops are: Top: 2-1/2 in. (64 mm) Bottom: 1/2 in. (13 mm) Sides: 1 in. (25 mm)

Figure 5.1 Horizontal Venting Clearances To Combustible

B. Wall Penetration Framing/Firestops

Combustible Wall Penetration

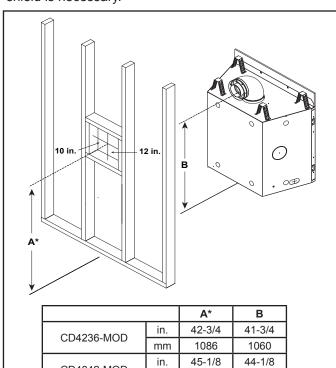
Whenever a combustible wall is penetrated, you must frame a hole for the wall shield firestop(s). The wall shield firestop maintains minimum clearances and prevents cold air infiltration.

- 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 12.A.) attached to them.
- · See Section 7.F. for information for regarding the installation of a horizontal termination cap.

Non-Combustible Wall Penetration

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



CD4842-MOD 1146 1111 mm

Shows center of vent framing hole for top venting. The center of the hole is one (1) in. (25.4 mm) above the center of the horizontal vent pipe.

Figure 5.2 Wall Penetration

C. Ceiling Firestop/Floor Penetration Framing

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 5.3).
- SLP pipe only Frame opening 9 in. x 9 in. (229 mm x 229 mm) whenever the vent penetrates a ceiling/floor (see Figure 5.3).
- 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 an attic insulation shield. It must be under joists between floors that are not insulated. Refer to Figure 5.4.
- · Secure in place with nails or screws.

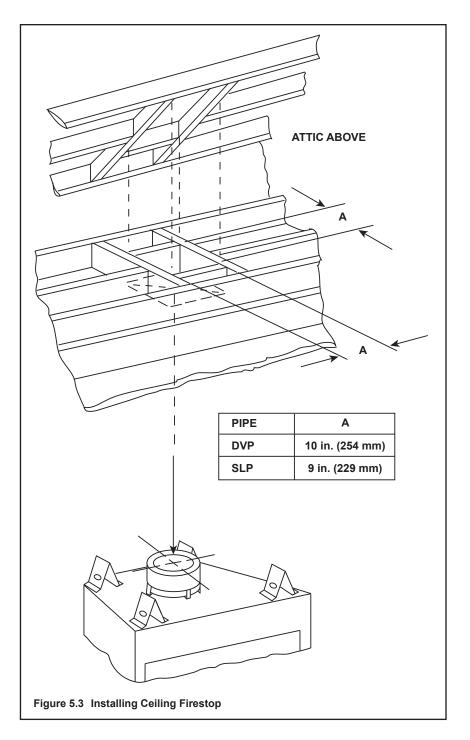
WARNING! Risk of Fire! DO NOT pack insulation around the vent. Insulation must be kept back from the pipe to prevent overheating.

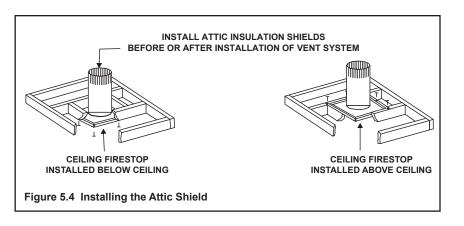
D. Install Attic Insulation Shield

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.





6 Appliance Preparation

A. Vent Collar Preparation

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



Figure 6.1 Seal Cap in Position

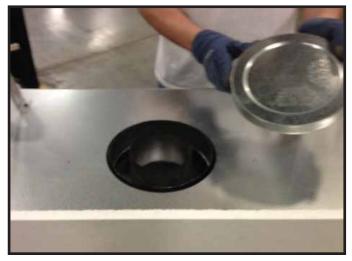


Figure 6.2 Remove the seal cap.

- 1. Remove the seal cap as shown in Figure 6.2.
- 2. Locate the fiberglass gasket in the manual bag. Attach the gasket to the outer wrap using two self-tapping screws. This creates a seal between the first vent component and the outer fireplace wrap. Figure 6.3 shows the gasket in place.
- 3. Secure the first section of venting to the firebox by attaching to the starting collar with screws. See Figure 6.4.

WARNING! Risk of Fire! DO NOT remove the installed piece of insulation from the firebox on CD4842-MOD model. Overheating will occur.



Figure 6.3 Gasket in Place

Note: Vent attachment method varies by model.

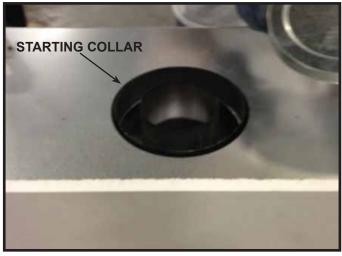


Figure 6.4 Starting Collar

B. 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.

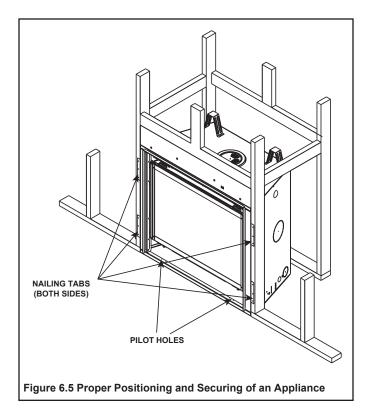
Block openings into the chase to prevent entry of blownin insulation. Make sure insulation and other materials are secured.

DO NOT notch the framing around the appliance standoffs.

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

The diagram shows how to properly position and secure the appliance (see Figure 6.5). Nailing tabs are provided to secure the appliance to the framing members.

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



C. Non-Combustible Material Installation

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 6.6.

WARNING! Risk of Fire! Non-combustible board must be installed across the top of the fireplace per Figure 6.6.



7

Venting and Chimneys

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 of 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.

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

All outer pipe joints must be sealed with 100% silicone (300 °F minimum continuous exposure rating), including the slip section that connects directly to the horizontal termination cap.

- Apply a bead of silicone sealant (300 °F minimum continuous exposure rating) inside the female outer pipe joint prior to joining sections. See Figure 7.1.
- 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 could leak.

Assemble Pipe Sections

Per Figure 7.2:

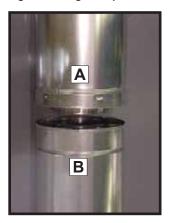
- Start the inner pipe on the lanced end of section A into the flared end of section B.
- Start the outer pipe of section A over the outer pipe of section B.
- Once both vents sections are started, push firmly until all lanced tabs lock into place.
- Lightly tug on the pipe to confirm the tabs have locked.

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 7.1 High Temperature Silicone Sealant



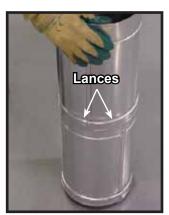
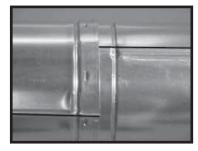


Figure 7.2

Figure 7.3

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



CORRECT



INCORRECT

Figure 7.4 Seams

Assemble Vent Sections

(SLP Only)

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

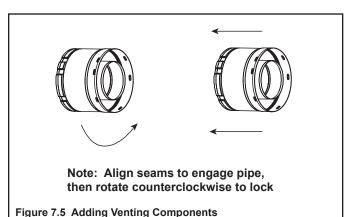
- Attach a DVP-SLP24 adapter to the starting collar of the appliance.
- Lock the vent components into place by sliding the pipe section onto the collar.
- Align the seam of the pipe and seam of collar to allow engagement. Rotate the vent component to lock into place. Use this procedure for all vent components. See Figure 7.5.
- 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.

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

For Installation into a commercial, multi-family (multi-level exceeding two stories) or high-rise applications: All outer pipe joints must be sealed with high temperature silicone (300 °F minimum continuous exposure rating), including the slip section that connects directly to the horizontal termination cap.

- Apply a bead of silicone sealant (300 °F minimum continuous exposure rating) inside the female outer pipe joint prior to joining sections. See Figure 7.1.
- 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 could leak.



B. 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 7.6.
- · Slide together to the desired length.

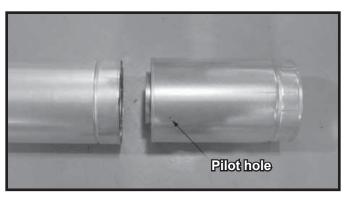


Figure 7.6 Slip Section Pilot Holes

- 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 7.7.

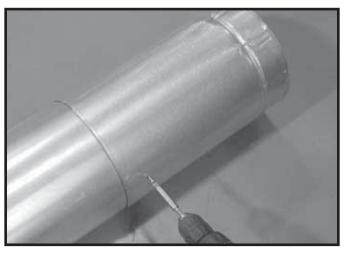


Figure 7.7 Screws into Slip Section

 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 (300 °F minimum continuous exposure rating).

- Apply a bead of silicone sealant (300 °F minimum continuous exposure rating) 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.

C. 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 could 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.

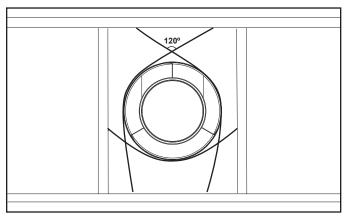


Figure 7.8 Securing Vertical Pipe Sections

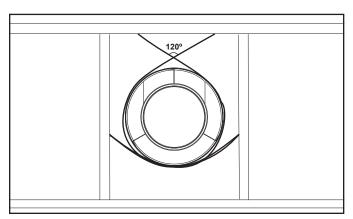


Figure 7.9 Securing Horizontal Pipe Sections

D. Disassemble Vent Sections

- Rotate either section (see Figure 7.10) so the seams on both pipe sections are aligned as shown in Figure 7.11.
- · Pull carefully to separate the pieces of pipe.

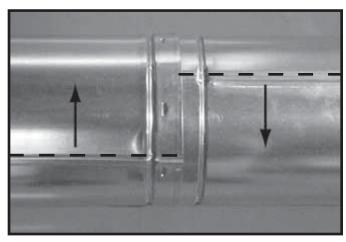


Figure 7.10 Rotate Seams for Disassembly

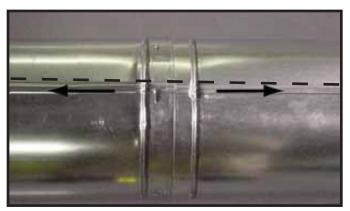
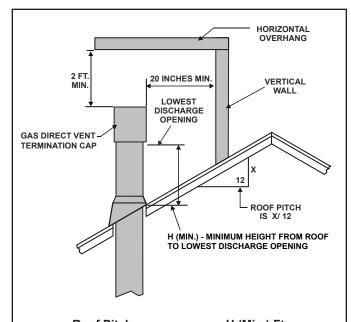


Figure 7.11 Align and Disassemble Vent Sections

E. Vertical Termination Requirements Install Metal Roof Flashing

- See minimum vent heights for various pitched roofs (Figure 7.12) 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 7.13.



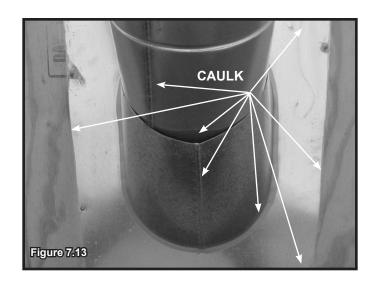
Roof Pitch	<u>H (Min.) Ft.</u>
Flat to 6/12	1.0*
Over 6/12 to 7/12	1.25*
Over 7/12 to 8/12	1.5*
Over 8/12 to 9/12	2.0*
Over 9/12 to 10/12	2.5*
Over 10/12 to 11/12	3.25
Over 11/12 to 12/12	4.0
Over 12/12 to 14/12	5.0
Over 14/12 to 16/12	6.0
Over 16/12 to 18/12	7.0
Over 18/12 to 20/12	7.5
Over 20/12 to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

* 3 foot minimum in snow regions

Figure 7.12 Minimum Height From Roof to Lowest Discharge Opening

NOTICE: Failure to properly caulk the roof flashing and pipe seams could 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 7.13.
- Caulk the overlap seam of any exposed pipe sections that are located above the roof line.



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 7.14).
- Tighten nut and make sure the collar is tight against the pipe section.
- Caulk around the top of the storm collar. See Figure 7.15.

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 7.15).



F. Horizontal Termination Requirements 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 7.16).
- 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 7.16.

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

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

Important Notice: Heat shields may <u>not</u> be field constructed.

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.

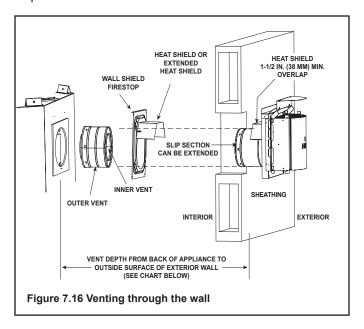
Failure to maintain overlap could cause overheating and fire.

- 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 4 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-TRAPK2
004000	Top Vent <u>Depth</u>	Top Vent <u>Depth</u>
CD4236- MOD	2-3/4 in. to 4-5/8 in.	5-1/8 in. to 9-1/8 in.
CD4842- MOD	DVP-HPC1	DVP-HPC2
IVIOD	Top Vent <u>Depth</u>	Top Vent <u>Depth</u>
	2-3/4 in. to 4-7/8 in.	4-7/8 in. to 9 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)

8

Electrical Information

A. General Information

WARNING! Risk of Shock or Explosion! DO NOT wire 110-120 VAC to the valve or to the appliance wall switch. Incorrect wiring will damage controls.

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.
- Low voltage and 110-120 VAC voltage cannot be shared within the same wall box.

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 8.1).
- Pull the electrical wires from outside the appliance through the opening into the valve compartment and secure wires with a Romex connector. See Figure 8.1.
- Make all necessary wire connections to the junction box/ receptacle and reattach the junction box/receptacle to the outer shell.

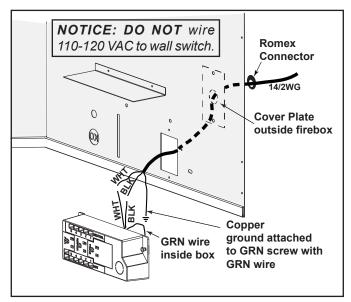


Figure 8.1 Junction Box Detail

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.
- A standard ON/OFF switch is compatible.

Electrical Service and Repair

WARNING! Risk of Shock! Label all wires prior to disconnection when servicing controls. Wiring errors could 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.

B. Wiring Requirements

Intellifire™ Plus Ignition System Wiring

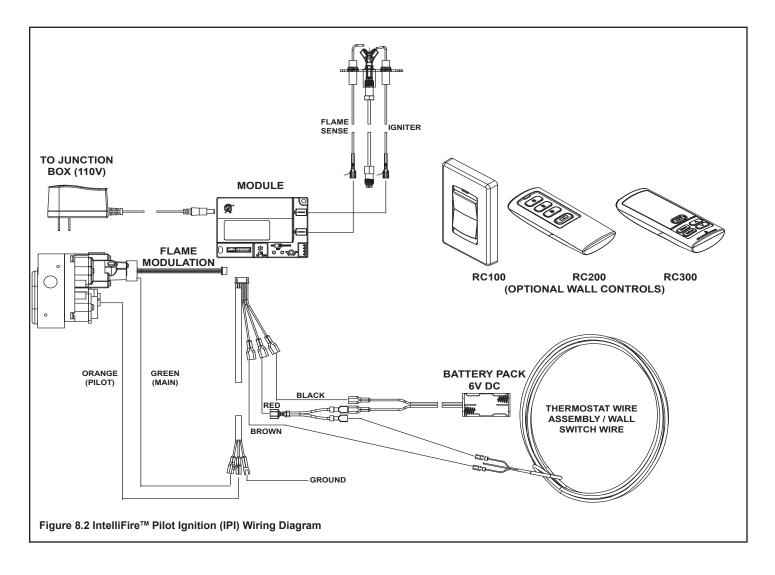
 Wire the appliance junction box to 110-120 VAC for proper operation of the appliance.

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 8.2, IPI Wiring Diagram.
- This appliance is equipped with an IntelliFire™ Plus control valve which operates on a 6 volt/1.5 AMP 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.

NOTICE: Batteries should only be used as a power source in the event of an emergency power outage. Batteries should not be used as a primary long-term power source. Battery polarity must be correct when installing batteries.

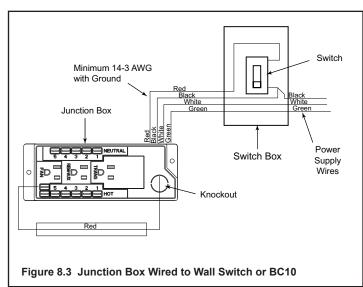
Do not store batteries in the battery pack when the appliance is powered by the 6 volt transformer connected to permanent electrical service.



Wall Switch Installation for Fan (Optional)

If the box is being wired to a wall mounted switch for use with a fan (See Figure 8.3):

- 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.



9

Gas Information

A. Fuel Conversion

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

B. Gas Pressure

- Optimum appliance performance requires proper input pressures.
- Gas line sizing requirements will be determined in ANSI 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 could 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.

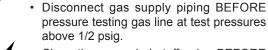
A WARNING

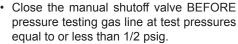


Fire Risk.

Explosion Hazard.

High pressure will damage valve.





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 3 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 noncombustible, 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 input rate 4% for each 1000 feet above 2000 feet.
- In CANADA: Input ratings are certified without a reduction of input rate for elevations up to 4500 feet (1370 m) above sea level. Please consult provincial and/or local authorities having jurisdiction for installations at elevations above 4500 feet (1370 m).

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

E. 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 9.1.

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

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

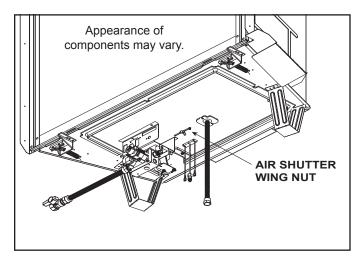


Figure 9.1 Air Shutter

Air Shutter Settings

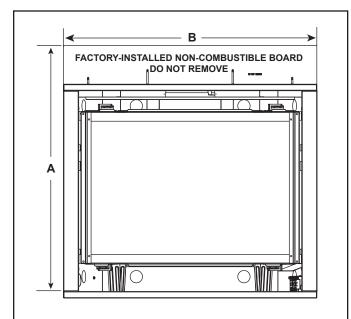
	NG	LP
CD4236-MOD	Fully Closed	Fully Open
CD4842-MOD	Fully Open	Fully Open

10 Finishing

A. 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 decorative fronts, 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 10.1.

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 decorative fronts and louvers.



		Α	В
CD4236-MOD	inches	39-3/4	41
	millimeters	1010	1041
CD4842-MOD	inches	41-3/4	48
	millimeters	1060	1219

Figure 10.1 Noncombustible Facing Diagram

B. Finish and Sealing Joints

All joints between the finished wall sheathing and the appliance must be sealed with non-combustible materials. Sealants, such as caulk or mastic used to seal the gap between the wall and the fireplace, should be rated at a minimum continuous exposure to 300 °F.

Finishing Around Opening with Gypsum Wallboard

Gypsum wallboard (drywall) joints adjacent to the fireplace opening, including the non-combustible board on the appliance, require special attention to minimize cracking. When installing gypsum wallboard around the fireplace, install the hole for the fireplace opening in a single wallboard sheet, if possible. This will minimize the joints adjacent to the fireplace opening.

Tape wall board joints around the fireplace opening with fiberglass-mesh tape. It will provide a more crack-resistant joint than paper tape. Fill, smooth and finish wall joints with chemically setting-type joint compound. It will provide a more crack-resistant joint than air-drying light-weight compound.

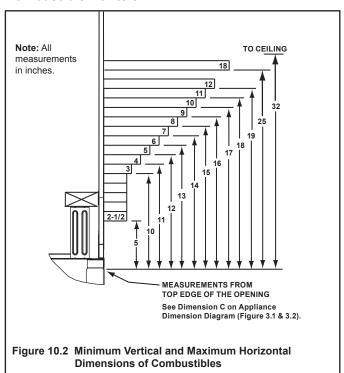
Painting

If desired finishing includes a painted wall, 100% acrylic latex with compatible primer is recommended around this appliance. Oil-based or standard acrylic paints may discolor due to heat exposure.

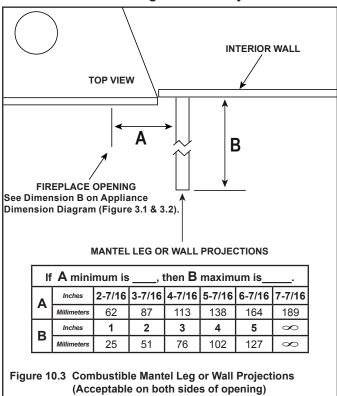
C. Mantel and Wall Projections

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



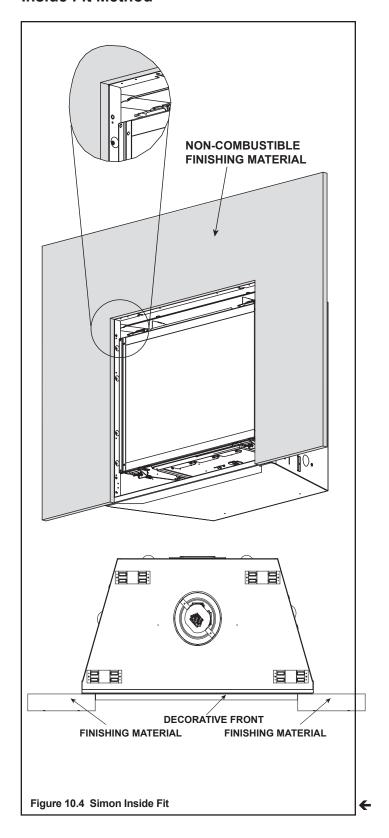
Combustible Mantel Legs or Wall Projections



D. Decorative Front Selection

Only decorative fronts certified for use with this appliance model may be used. Contact your dealer for a list of decorative fronts that may be used.

Finishing Material Thickness: 0 - 4 Inches Inside Fit Method



A. 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 assembly from the appliance (see Figure 11.1).

Replacing Fixed Glass Assembly

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

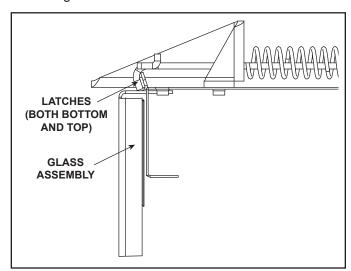


Figure 11.1 Fixed Glass Assembly

B. Remove the Shipping Materials

Remove shipping materials from inside or underneath the firebox.

 The splatter guard is a piece of corrugated material used to protect the appliance during the installation process before finishing work on the whole hearth is complete. Splatter guards may be factory installed or accompany the decorative front of the unit, depending on the fireplace model. Splatter guards must be removed before appliance is fired.

WARNING! Risk of Fire! Close the ball valve before installing the splatter guard to prevent accidental lighting. Remove the splatter guard before lighting the appliance.

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 inclued with accessories. Contact your dealer for a list of approved accessories.

E. Optional Glass Panel Installation

CAUTION! Risk of Cuts, Abrasions or Flying Debris. Wear protective gloves and safety glasses during installation.

CAUTION! Glass is fragile. Handle with care.

1. Install the rear glass panel as shown in Figure 11.2 the panel retainers and screws are included in the appliance manual bag.

Note: Center the glass panel retainer and screw to the firebox using 1 self tapping screw.

- 2. Slide the side glass panels in positions as shown in Figure 11.3. Center the glass retainers and screw using 1 self tapping screw per retainer.
- 3. Figure 11.4 shows the glass panels installed properly.

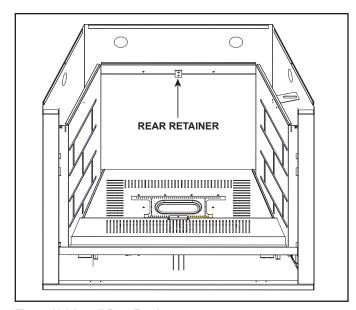


Figure 11.2 Install Rear Retainer

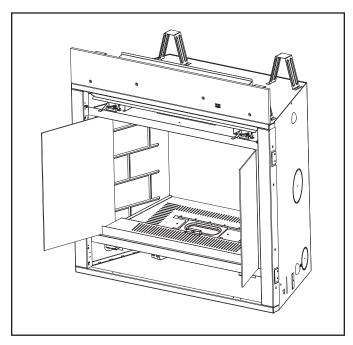


Figure 11.3 Install Side Glass Panels

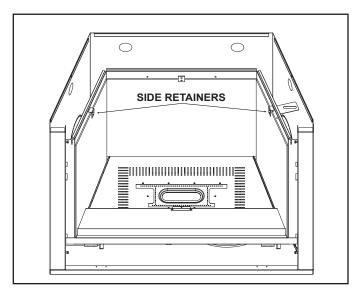


Figure 11.4 Install Side Retainers

F. Media Placement

WARNING! Risk of Explosion! Follow media placement instructions. Improperly placed media interfere with proper burner operation. Fireplace will not function properly. Delayed ignition may occur.

WARNING! Choking Hazard! Keep media out of reach of children.

- · DO NOT place media in pilot opening.
- DO NOT place media in a position that it may fall into the pilot opening.
- DO NOT use any media other than the media supplied with this fireplace or listed in Service Parts Section in this manual.
- DO NOT use more than 14 lb. of media per CD4842-MOD or 12 lb. per CD4236-MOD fireplace. Note: One bag of glass contains 7 lbs.
 - CD4236-MOD: Extra 2 lbs. may be saved for future use.
- 1. Place media evenly on the base pan. Figure 11.10 shows properly placed media.
- 2. The media can only be placed in the shaded areas as shown in Figure 11.8 and Figure 11.9.
- 3. Do not apply media over the pilot opening. See Figure 11.8 and Figure 11.9.
- 4. The rock fixture assembly is factory installed in the appliance. See Figure 11.5 and Figure 11.6.
- 5. After the media is properly installed, carefully remove the rock fixture assembly. Do not allow any media to fall into the opening. See Figure 11.7. Store the rock fixture assembly under the appliance for future use.



Figure 11.5 Rock Fixture Installed



Figure 11.6 Rock Fixture Assembly Installed



Figure 11.7 Remove Rock Fixture Assembly

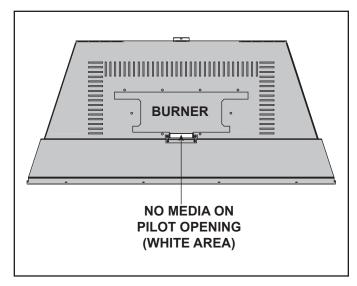


Figure 11.8 Placement of Media

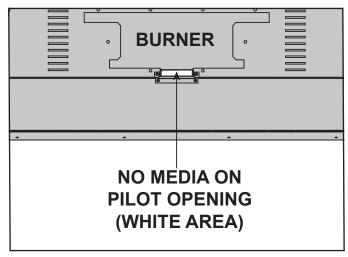


Figure 11.9 Placement of Media

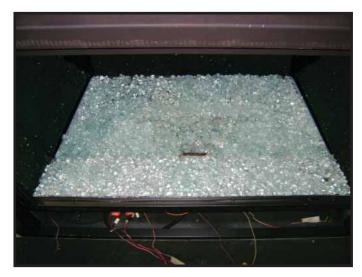
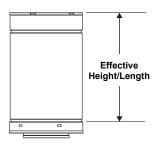


Figure 11.10 Proper Placement of Media

G. Install Trim and/or Surround

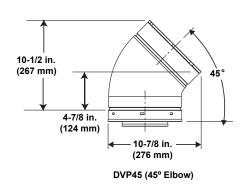
- Install optional trim kits and/or surrounds using the instructions included with the accessory.
- Use non-combustible materials to cover the gap between the sheet rock and the appliance (when applicable to the model).

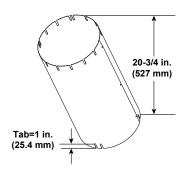
A. Vent Components Diagrams



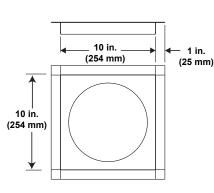
DVP Pipe (see chart)

Pipe	Effective Length		
1 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	

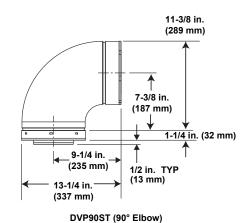




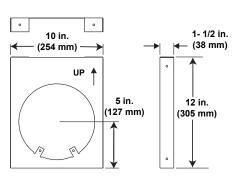
Finished Height: 19-3/4 in./502 mm UNIV-AS2 (Attic Insulation Shield)



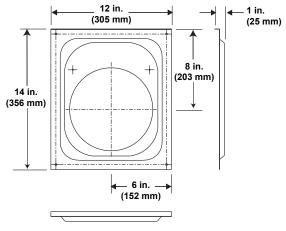
DVP-FS (Ceiling Firestop)







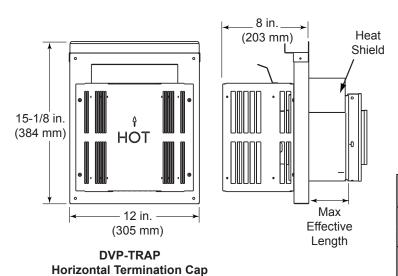
DVP-HVS (Vent Support)



DVP-WS (Wall Shield Firestop)

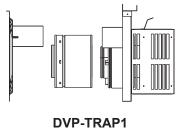
Figure 12.1 DVP vent components

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

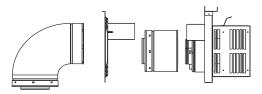




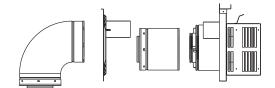
Term Cap	Minimum Effective Length	Maximum Effective Length
Trap1	3-1/8 in.	4-5/8 in.
	79 mm	117 mm
Trap2	5-3/8 in.	9-3/8 in.
	137 mm	238 mm



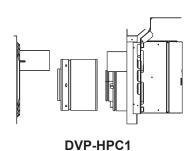
DVP-TRAP2

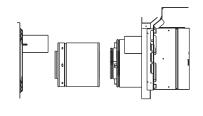


DVP-TRAPK1



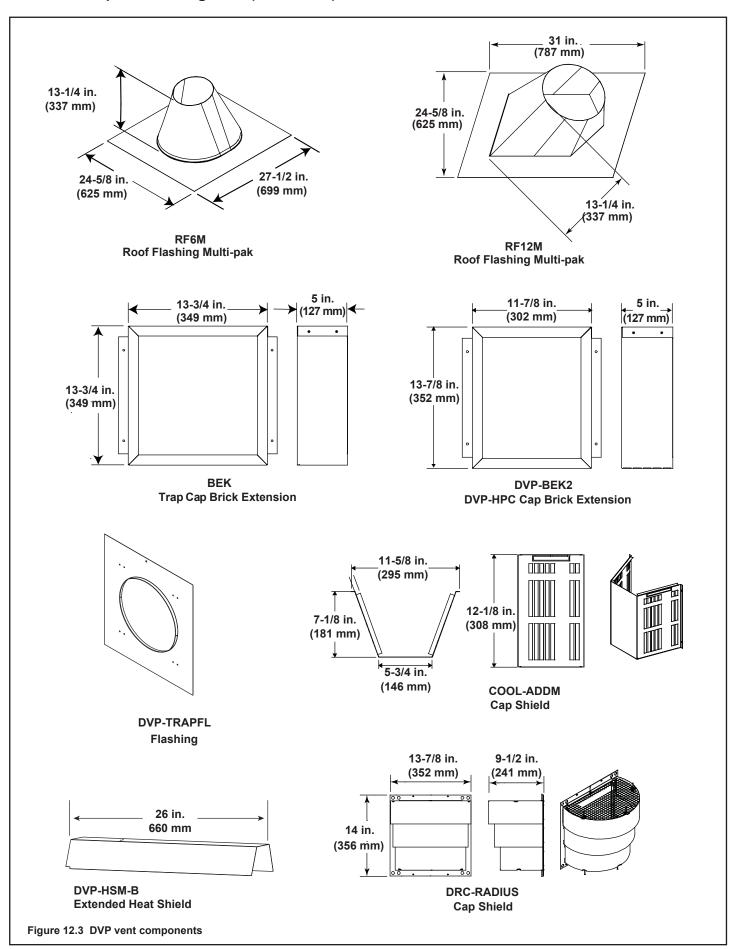
DVP-TRAPK2

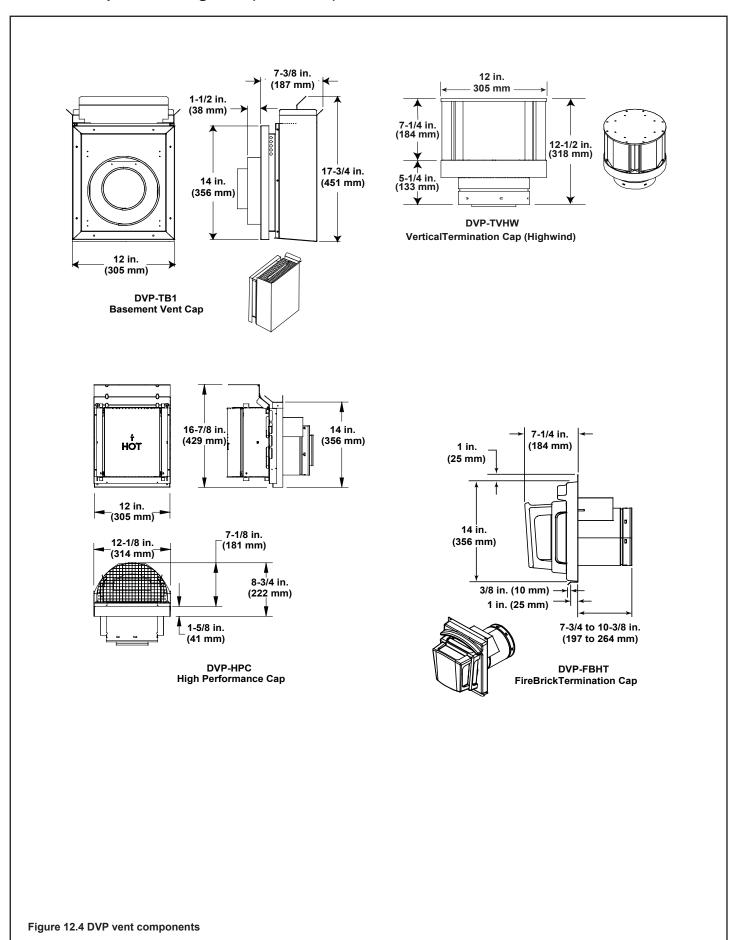


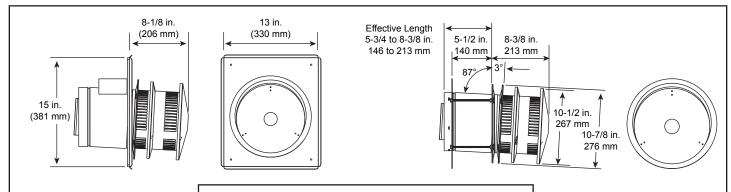


DVP-HPC2

Figure 12.2 DVP vent components







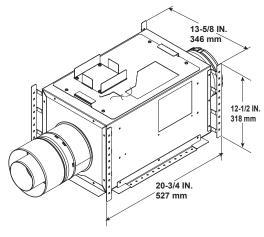
A WARNING



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.

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

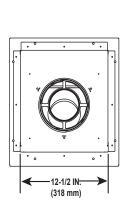


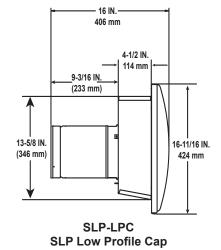
PVI-SLP Power Vent Inline

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		

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

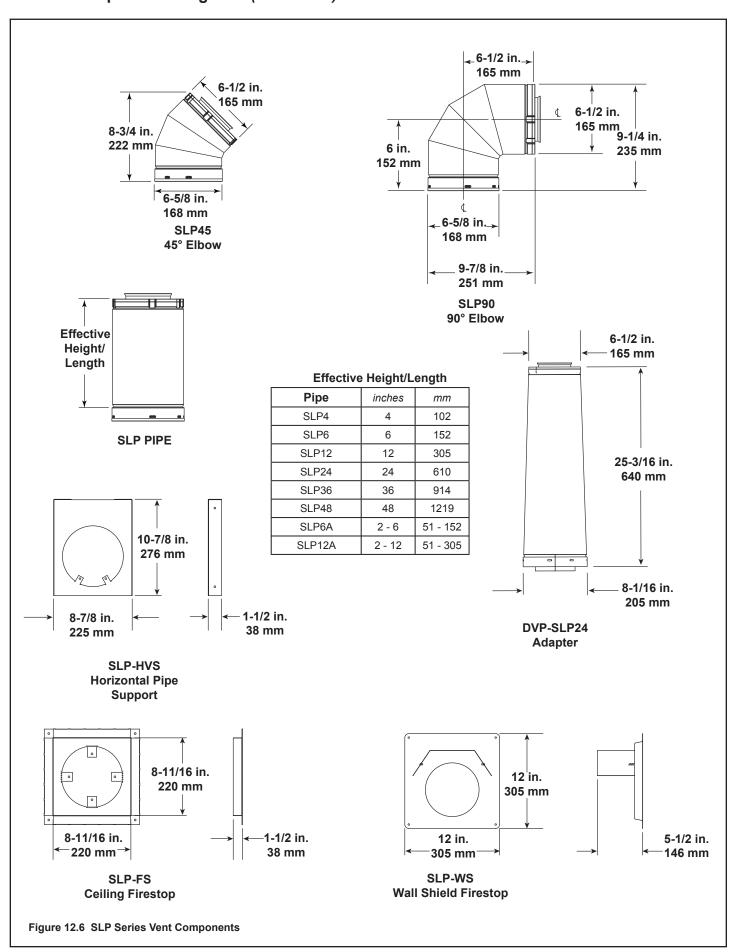
Note: Use only approved termination caps with the PVI-SLP. See instructions included with PVI-SLP kit.



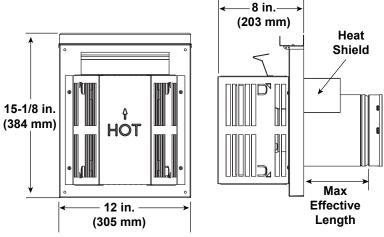


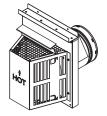
15 IN. (381 mm)

Figure 12.5 Vent Components



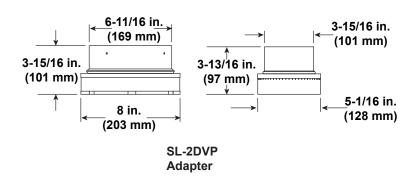
Note: Heat shields MUST overlap by a minimum of 1-1/2 in. (38 mm). The heat shield is designed to be used on a wall 4 in. to 7-1/4 in. (102 mm to 184 mm) thick. If wall thickness is less than 4 in. (102 mm) the existing heat shields must be field trimmed. If wall thickness is greater than 7-1/4 in. (184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

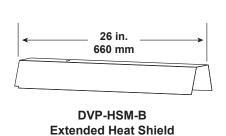




Term Cap	Minimum Effective Length	Maximum Effective Length
Trap1	3-1/8 in.	4-3/4 in.
	79 mm	121 mm
Trap2	5-1/4 in.	9-1/4 in.
	133 mm	235 mm

SLP-TRAP
Horizontal Termination Cap

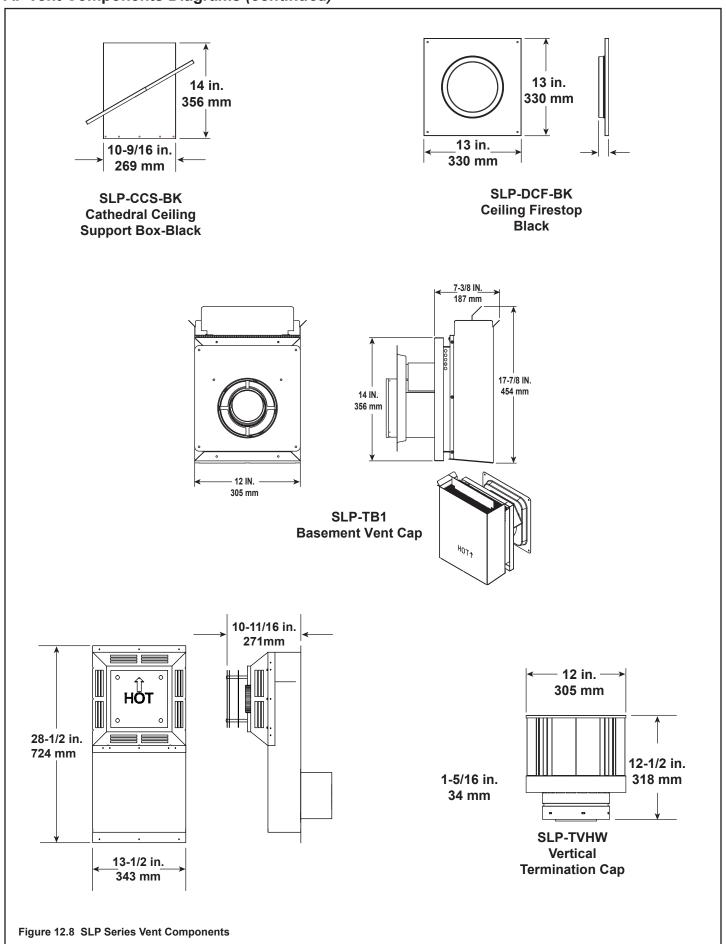




14-7/16 in. 367 mm 2-5/16 in. 367 mm

SLP-WT-BK Wall Thimble-Black

Figure 12.7 SLP Series Vent Components



B. 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.

Remote Controls, Wall Controls and Wall Switches

After a qualified service technician has installed the remote control, wall control or wall switch, 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.

Decorative Fronts

WARNING! Risk of Fire! Install ONLY decorative fronts or fronts approved by Hearth & Home Technologies. Unapproved decorative fronts 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 front.

Optional Fan

After a qualified service technician has installed the remote control, follow the instructions supplied with the fan kit to operate your fan.

See your dealer if you have questions.

Optional Heat-Zone® Gas Kit

After a qualified service technician has installed the Heat-Zone® Gas Kit, follow the instruction supplied with the kit for operation.

See your dealer if you have questions.

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.