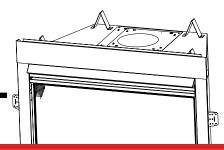
meatilator

The first name in fireplaces

Models:

CD4236R **CD4842R** CD4236LR CD4842LR CD4236IR CD4842IR **CD4236ILR CD4842ILR Direct Vent Gas Applianc**



Owner's Manual

Installation and Operation

GAS-FIRED

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





CAUTION

DO NOT DISCARD THIS MANUAL

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



WARNING

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

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- What to do if you smell gas:
 - Do not try to light any appliance.
 - Do not touch any electrical switch. Do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

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

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



WARNING

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



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

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

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

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

In the Commonwealth of Massachusetts:

installation must be performed by a licensed plumber or gas fitter;

See Table of Contents for location of additional Commonwealth of Massachusetts requirements.



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

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

Congratulations

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

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

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

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

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

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

Listing Label Information/Location

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

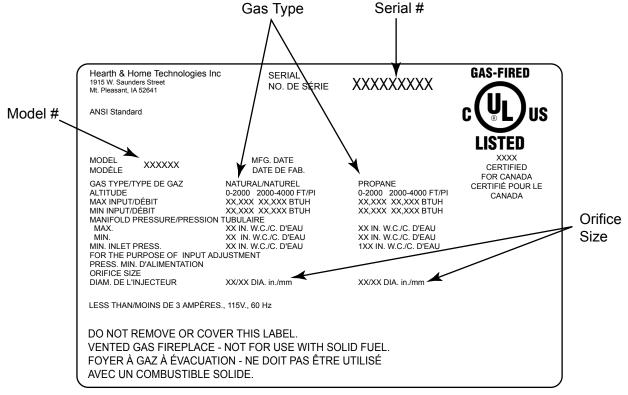


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Note: An arrow (→) found in the text signifies change in content.

Listing and Code Approvals

A. Appliance Certification

MODELS: CD4236R, CD4236IR, CD4236ILR

CD4842R, CD4842IR, CD4842ILR

LABORATORY: Underwriters Laboratories, Inc. (UL)

TYPE: Direct Vent Gas Appliance

STANDARD: ANSI Z21.88-2002-CSA2.33-2002-UL307B

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

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

B. Glass Specifications

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

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

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

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

C. BTU Specifications

Model	Max Input BTUH	Min Input BTUH	Orifice Size
CD4236R CD4236IR	30,000	20,000	.104 in. 2.64 mm
CD4236ILR	29,500	20,000	.065 in. 1.65 mm
CD4842R CD4842IR	33,000	22,000	.109 in. 2.77 mm
CD4842ILR	32,500	20,500	.067 in. 1.70 mm

D. High Altitude Installations

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

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

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



WARNING

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

E. Non-Combustible Materials

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

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

F. Combustible Materials

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

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

G. 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) inch 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.

CAUTION

Check building codes prior to installation.

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

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

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



WARNING

Keep appliance dry.



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

B. Tools and Supplies Needed

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

Reciprocating saw Framing material

Pliers Hi temp caulking material

Hammer Gloves

Phillips screwdriver Framing square

Flat blade screwdriver Electric drill and bits (1/4 in.)

Plumb line Safety glasses Level Manometer Voltmeter Tape measure

Non-corrosive leak check solution

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

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

C. Inspect the Appliance and Components



WARNING

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



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

Report damaged parts to dealer.

- Carefully remove the appliance and components from the packaging.
- The vent system components and trim doors are shipped in separate packages.
- The gas logs may be packaged separately and must be field installed.
- Report to your dealer any parts damaged in shipment, particularly the condition of the glass.
- Read all of the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.



WARNING

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

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

Any such action may cause a fire hazard.

3

Framing and Clearances

Note:

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

A. Select Appliance Location

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



A WARNING

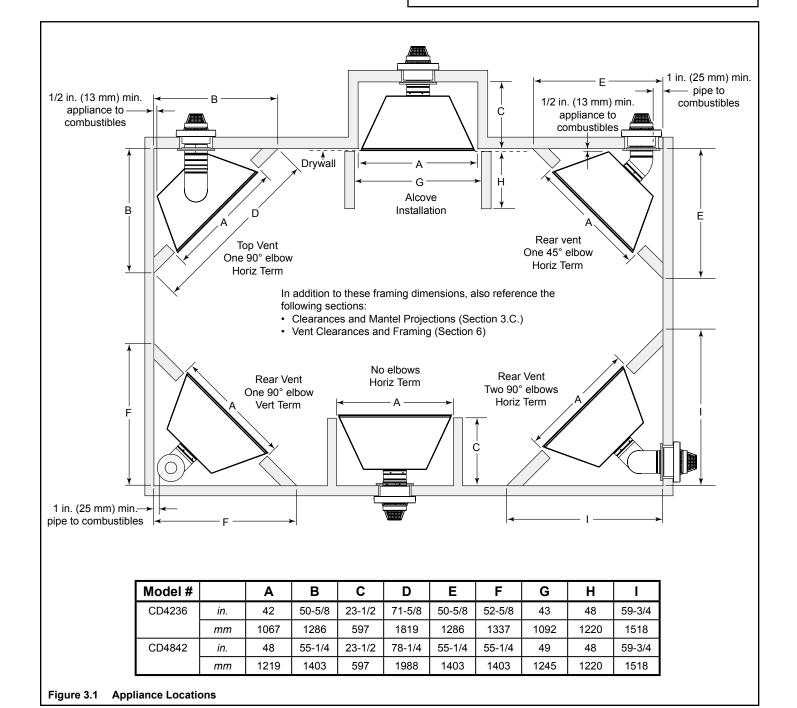
Fire Risk

Provide adequate clearance:

- Around air openings.
- For service access.

Locate appliance away from traffic areas.

Note: For actual appliance dimensions refer to Section 16.



B. Construct the Appliance Chase

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

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

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

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 ceiling firestops should be

caulked with high temperature caulk to seal gaps. Gas line holes and other openings should be caulked with high temperature caulk or stuffed with unfaced insulation. If the appliance is being installed on a cement slab, a layer of plywood may be placed underneath to prevent conducting cold up into the room.

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

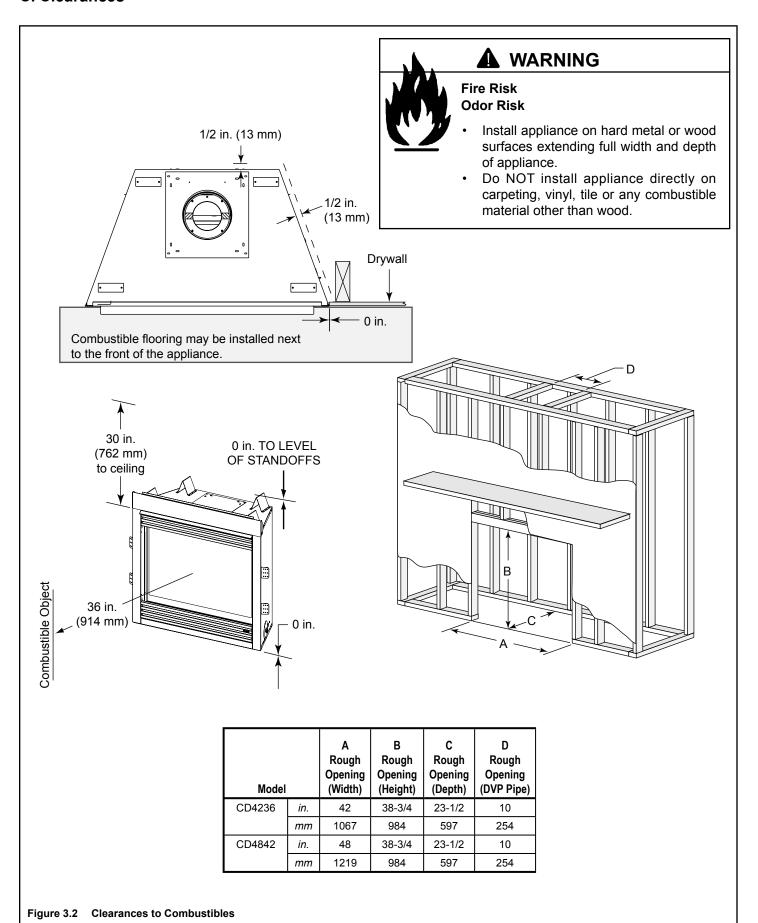


WARNING

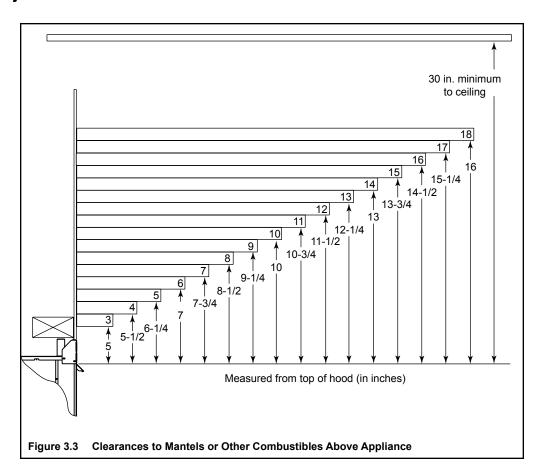
Fire Risk

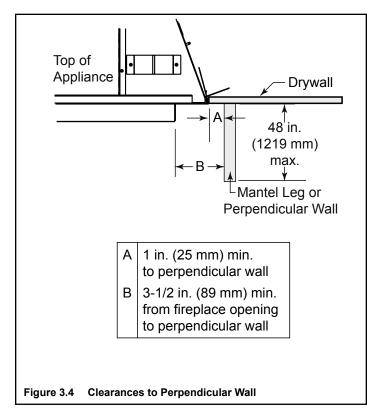
- Construct chase to all clearance specifications in manual.
- Locate and install appliance to all clearance specifications in manual.

C. Clearances



D. Mantel Projections





Termination Locations

A. Vent Termination Minimum Clearances



WARNING

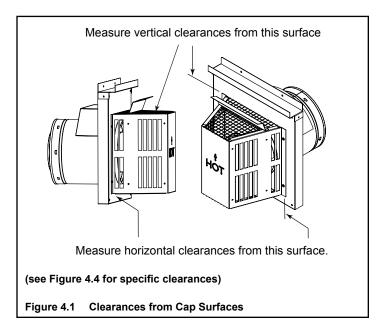
Fire Risk **Explosion Risk**

Maintain vent clearance to combustibles as specified. Do not pack air space with insulation or

other materials.

Failure to keep insulation or other materials

away from vent pipe may cause fire.



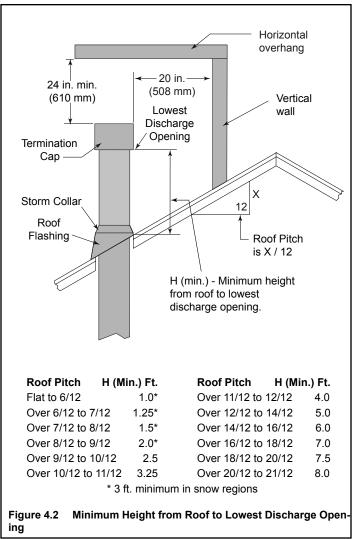
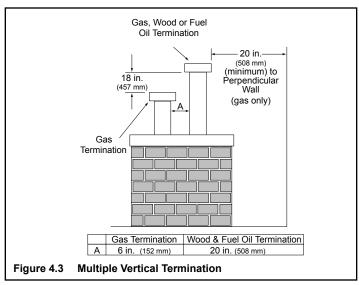
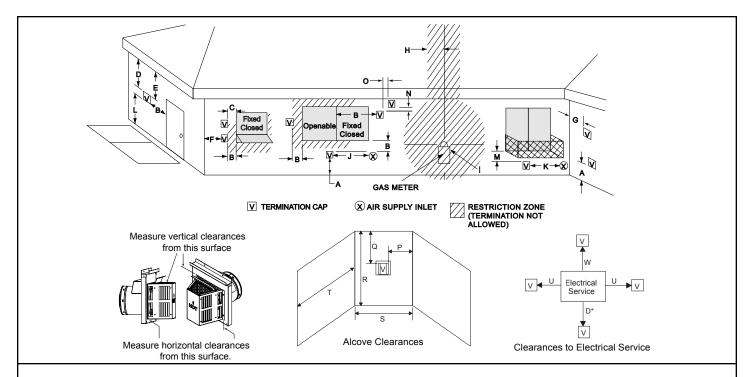


Figure 4.2 specifies minimum vent heights for various pitched roofs.





Dimension Descriptions

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

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

		S _{min}	T _{max}	
1 cap		3 ft	2 x S actual	
2 caps	6 ft		1 x S actual	
3 caps	9 ft		2/3 x S actual	
4 caps	12 ft		1/2 x S actual	
S _{min} = # term caps	x 3	T _{max} = (2/# term caps) x S (actua		

- U 6" min. Clearance from sides of electrical service.
- W 12" min. Clearance above electrical service.
- * As specified in CGA B149 Installation Codes
 - Note: Local codes or regulations may require different clearances.
- Clearance required to vinyl soffit material 30 in. (76 cm) minimum.

Note: Location of the vent termination must not interfere with access to the electrical service.

WARNING!

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

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

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

Figure 4.4 Minimum Clearances for Terminations



Vent Information and Diagrams

A. 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
H ₁	First section (closest to appliance) of horizontal length
H ₂	Second section of horizontal length



WARNING

Fire Risk **Explosion Risk** Asphyxiation Risk



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

- Vent this appliance directly outside.

Use separate vent system for this appliance.

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

B. Use of Elbows

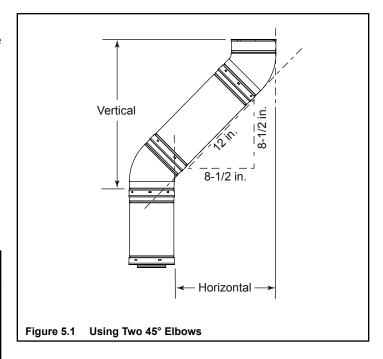
CAUTION

ALL vent configuration specifications MUST be

- This product is tested and listed to these specifications.
- Appliance performance will suffer if specifications are not followed.

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 5.1).

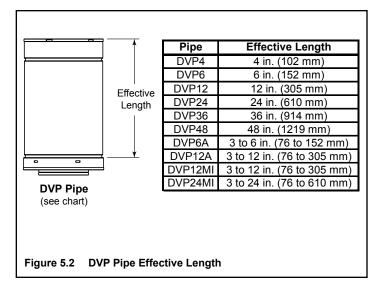
Two 45° elbows may be used in place of one 90° elbow. On 45° runs, 1 ft of diagonal is equal to 8-1/2 in. horizontal run and 8-1/2 in. vertical run. A length of straight pipe is allowed between two 45° elbows (see Figure 5.1).



C. 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 5.2).
- Measurements are made from the appliance outer wrap, not from the standoffs.
- Horizontal terminations are measured to the outside mounting surface (flange of termination cap) (see Figure 4.1).
- Vertical terminations are measured to top of last pipe before termination cap.
- Horizontal pipe installed level with no rise.



D. Vent Diagrams



A WARNING

Fire Risk Explosion Risk

Do NOT pack insulation or other combustibles between firestops.

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

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

The first 90° elbow MUST be a starter elbow.

To replace the first starter elbow with two 45° elbows, refer to Figure 5.4. All other 90° elbows can be replaced with two 45° elbows.

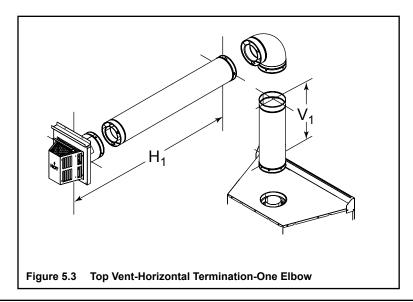
General Rules:

- SUBTRACT 3 ft from the total H measurement for each 90° elbow installed horizontally.
 SUBTRACT 1-1/2 ft from the total H measurement for each 45° elbow installed horizontally.
- A maximum of three 90° elbows (or six 45° elbows) may be used in any vent configuration. Some elbows may be installed horizontally. See Figure 5.6.
- Elbows may be placed back to back anywhere in the system except as shown in Figure 5.4.
- When penetrating a combustible wall, a wall shield firestop must be installed.
- When penetrating a combustible ceiling, a ceiling firestop must be installed.

Top Vent—Horizontal Termination—One Elbow

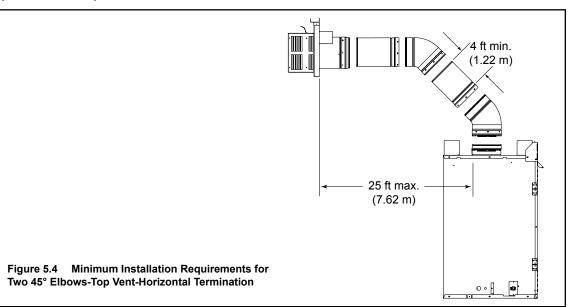
V₁ min.	V₁ max.	H₁ max.	
0*	-	18 in./457 mm	
6 in./152 mm	-	6 ft/1.83 m	
12 in./305 mm	-	11 ft/3.35 m	
18 in./457 mm	-	18 ft/5.49 m	
24 in./610 mm	-	25 ft/7.62 m	
-	25 ft/7.62 m	25 ft/7.62 m	

^{*} You may install the elbow directly on top of the CD4236. The CD4842 requires the DVP6 vent section prior to the elbow.



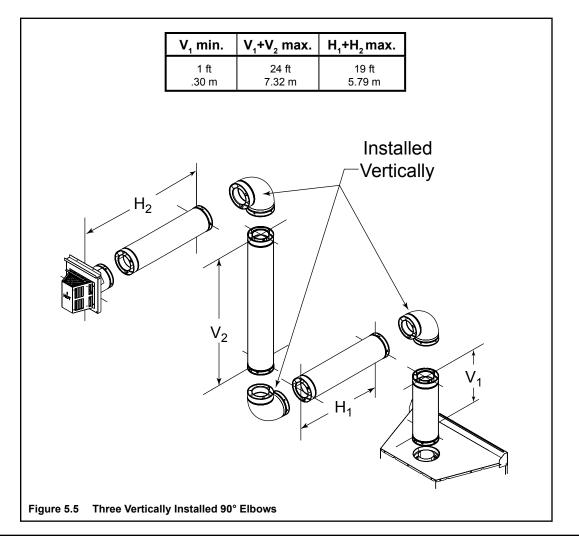
Top Vent—Horizontal Termination—Two 45° Elbows

Installation requirements to replace the first 90° elbow with two 45° elbows:



Top Vent—Horizontal Termination—Three Vertical Elbows

See Figure 5.6 for information about installing elbows horizontally.

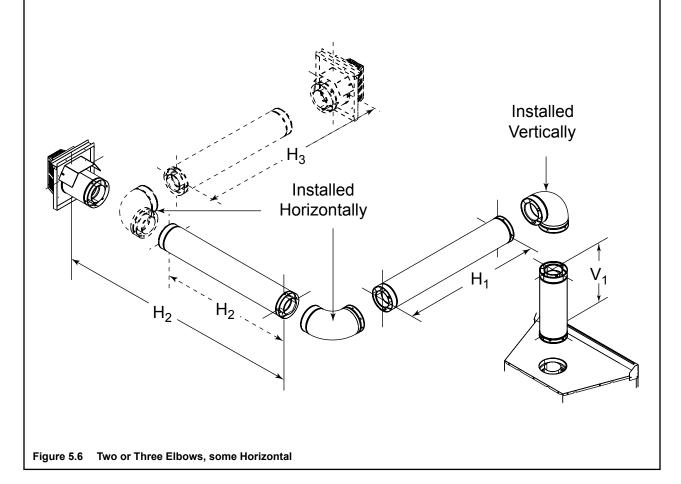


Top Vent—Horizontal Termination—Two or Three Elbows

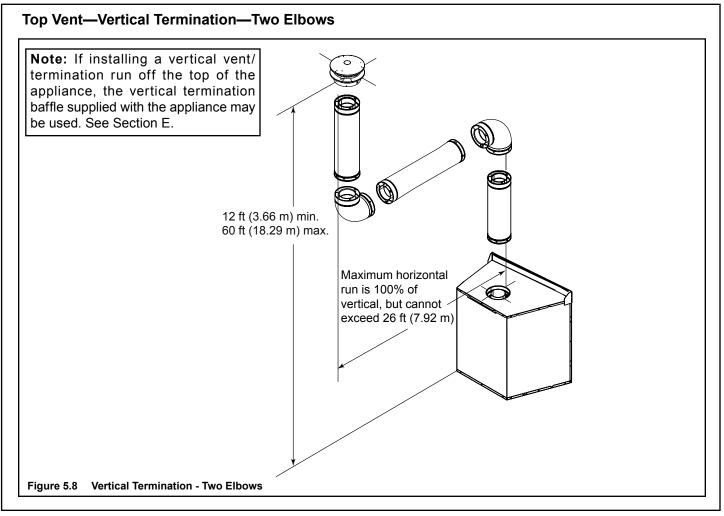
You may use a maximum of three 90° elbows (or six 45° elbows) in any vent configuration, Some may be installed horizontally.

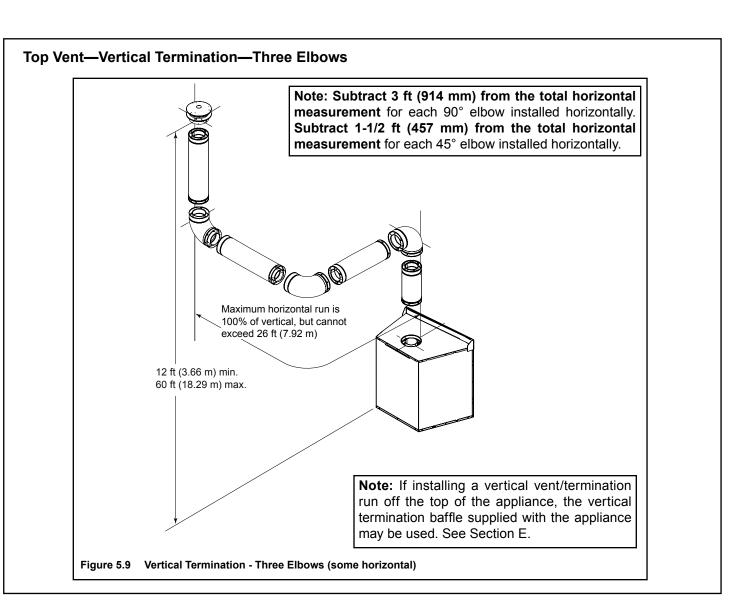
Note: Subtract 3 ft (914 mm) from the total horizontal measurement for each 90° elbow installed horizontally. Subtract 1-1/2 ft (457 mm) from the total horizontal measurement for each 45° elbow installed horizontally.

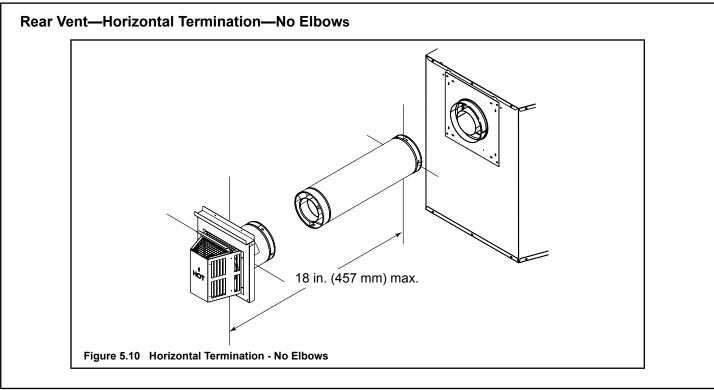
V₁ min.	V₁ max.	H₁+H₂ max.	H ₁ +H ₂ +H ₃ max.
6 in./152 mm	х	6 ft/1.83 m	х
12 in./305 mm	х	11 ft/3.35 m	11 ft/3.35 m
18 in./457 mm	х	18 ft/5.49 m	18 ft/5.49 m
24 in./610 mm	х	25 ft/7.62 m	25 ft/7.62 m
х	25 ft/7.62 m	25 ft/7.62 m	25 ft/7.62 m



Note: If installing a vertical vent/termination run off the top of the appliance, the vertical termination baffle supplied with the appliance may be used. See Section E. 12 ft (3.66 m) min. 60 ft (18.29 m) max. Figure 5.7 Vertical Termination - No Elbows

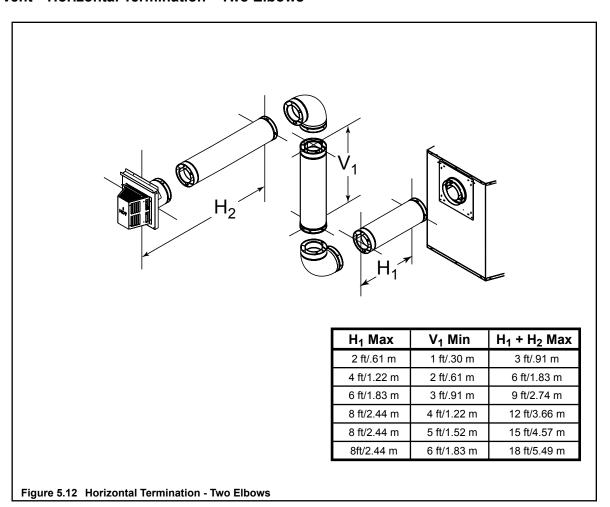






Rear Vent—Horizontal Termination—Two Elbows

Figure 5.11 Horizontal Termination - One 45° Elbow



Rear Vent—Horizontal Termination—Three Elbows

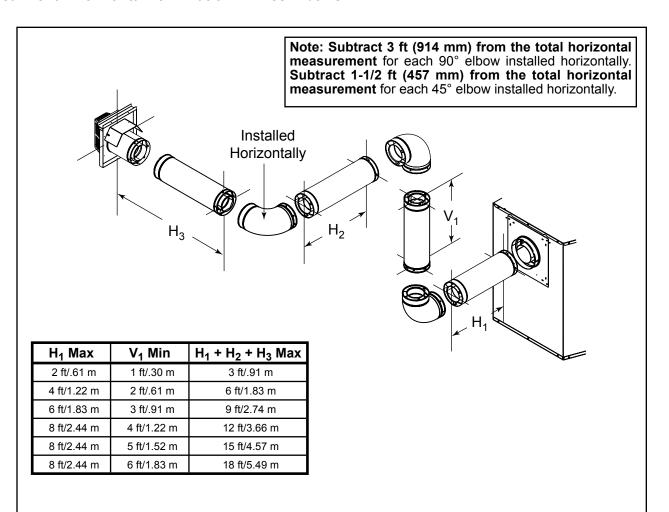
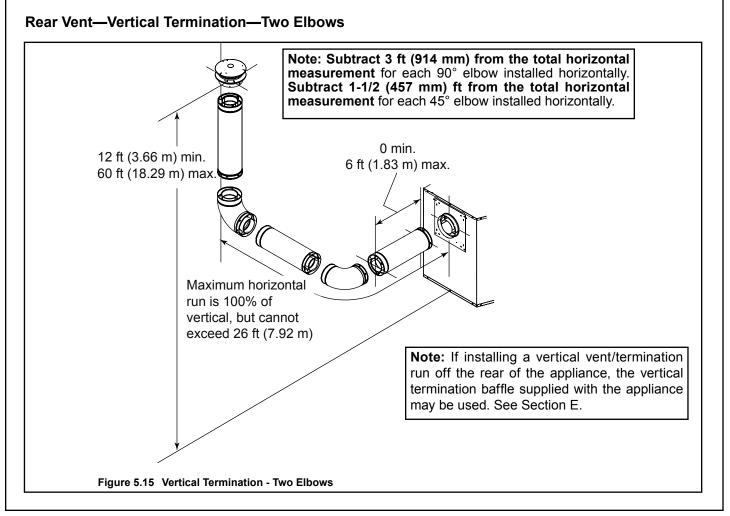
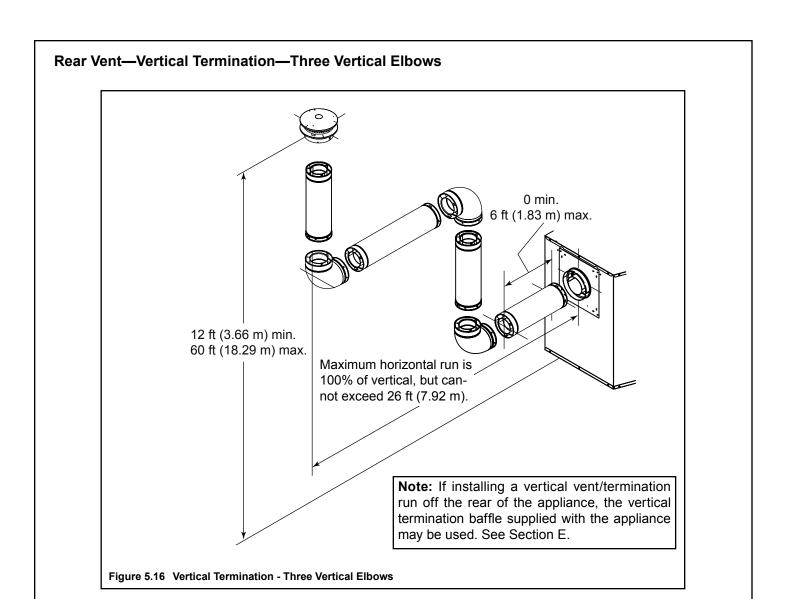


Figure 5.13 Horizontal Termination - Three Elbows





E. Installing Vertical Termination Baffle

Note: For vertically terminated installations only.

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

- 1. Remove the glass (refer to Section 12.H.) to access the firebox and 5 in. inner flue.
- 2. Fold the baffle (Figure 5.17) to an approximate 90° angle (see Figure 5.18).

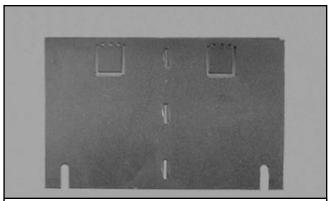


Figure 5.17 Flat Baffle

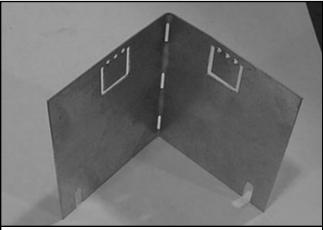


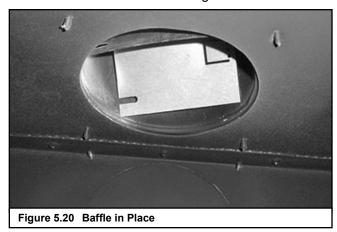
Figure 5.18 Baffle Bent to 90° Angle

3. Squeeze the open end of the bent baffle with one hand. Insert the baffle bent side up into the inner flue so that the bottom of the baffle is above the bead on the inside of the collar. See Figure 5.19.



Figure 5.19 Placing the Baffle

Release pressure on the baffle so that it is wedged against the sides of the flue collar. See Figure 5.20.



5. Replace the glass (refer to Section 12.H.).

6. Start the appliance.

Vent Clearances and Framing

A. Pipe Clearances to Combustibles



WARNING

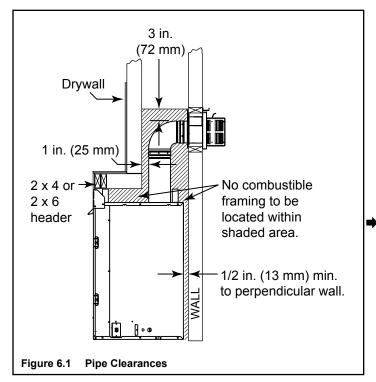
Fire Risk

Explosion Risk

Maintain vent clearance to combustibles as specified.

Do not pack air space with insulation or other materials.

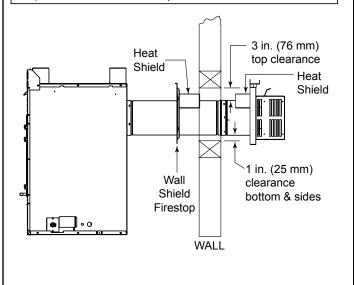
Failure to keep insulation or other materials away from vent pipe may cause fire.



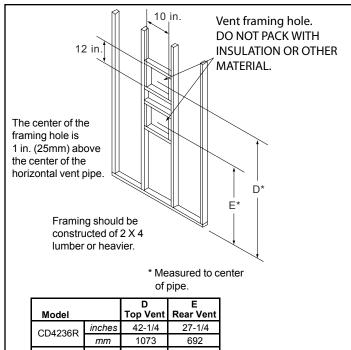
B. Wall Penetration Framing

- Frame a hole in a combustible wall for a wall shield firestop (Figures 6.1 - 6.3) whenever a wall is penetrated. Use same size framing materials as those used in the wall construction. The wall shield firestop maintains minimum clearances and prevents cold air infiltration.
- If the hole being penetrated is surrounded by noncombustible materials such as concrete, a hole with diameter 1 in. greater than the pipe is acceptable.

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.



Horizontal Venting Clearances to Combustible Materials Figure 6.2



Model		D Top Vent	E Rear Vent
CD4236R	inches	42-1/4	27-1/4
CD4230K	mm	1073	692
CD4842R	inches	48-1/4	27-1/4
OB TO IZIT	mm	1226	692

Figure 6.3 **Exterior Wall Hole**

C. Vertical Penetration Framing



WARNING

Fire Risk

Keep loose materials or blown insulation from touching the vent pipe.

- National building codes recommend using attic shield to keep loose materials/blown insulation from contacting vent.
- Hearth & Home Technologies requires the use of an attic shield.

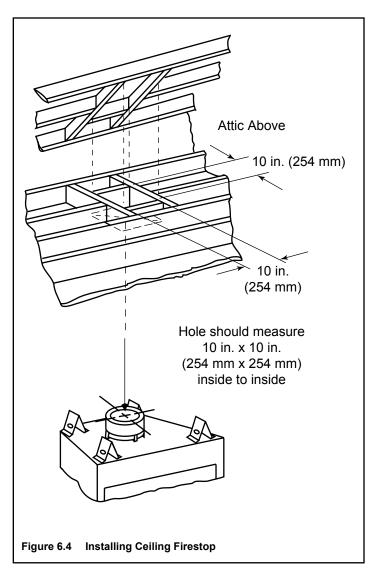
Install the Ceiling Firestop

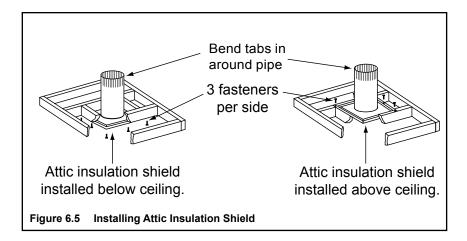
- Frame an opening 10 in. by 10 in. whenever the vent system penetrates a ceiling/floor (see Figure 6.4).
- Frame the area with the same sized lumber as used in ceiling/floor joist.
- When installing a top vent vertical termination appliance the hole should be directly above the appliance, unless the flue is offset.
- Do not pack insulation around the vent. Insulation must be kept away from the pipe.

Note: An additional ceiling firestop is not required if attic insulation shield is used.

Install Attic Insulation Shield

- Frame opening for attic insulation shield.
- Attic insulation shield may be installed above or below ceiling (see Figure 6.5).
- · Secure with three fasteners on each side.
- Fold tabs at top of attic shield in toward vent pipe. Tabs must keep vent pipe centered within shield.
- Field construct additional shield height if insulation is deeper than height of attic shield.





Appliance Preparation



CAUTION



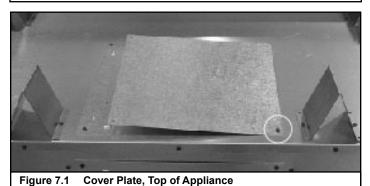
Sharp Edges

Wear protective gloves and safety glasses during installation.

A. Convert from Top Vent to Rear Vent

Remove the screw holding heat shield cover plate to top of appliance and set aside. See Figure 7.1

Note: If the appliance is to be top vented discard this plate and replace the screw you removed. If the appliance is to be rear vented, continue to the next step and Figure 7.2.



Remove three remaining screws holding the plate surrounding flue. See Figure 7.2. Remove plate and set aside.

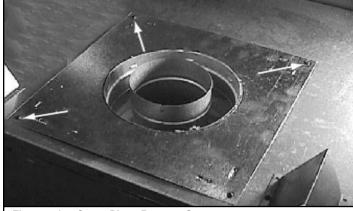


Figure 7.2 Cover Plate, Remove Screws

Remove four screws holding inner plate surrounding the flue. See Figure 7.3. Remove inner plate and discard.

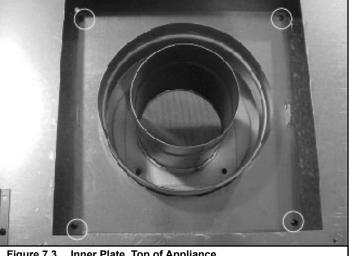
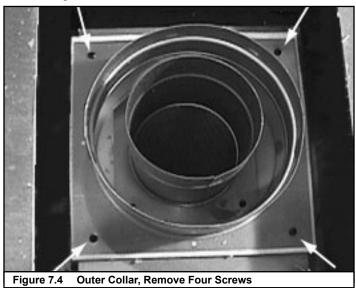
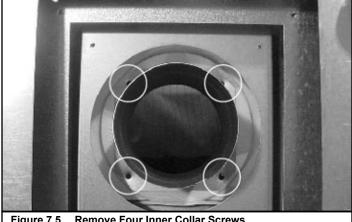


Figure 7.3 Inner Plate, Top of Appliance

Remove four screws holding outer collar to appliance top. See Figure 7.4. Remove outer collar.

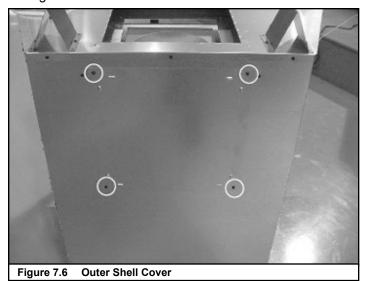


Remove four screws holding inner collar to appliance top. See Figure 7.5. Remove inner collar.

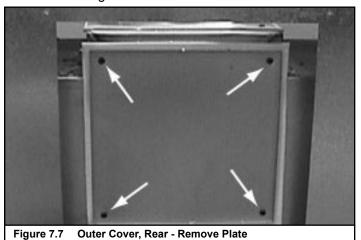


Remove Four Inner Collar Screws

Remove four screws holding outer shell cover. See Figure 7.6. Remove outer shell cover and set aside.



Remove four screws holding outer cover plate to appliance back. See Figure 7.7. Remove outer cover.



Remove four screws holding inner cover plate to appliance back. See Figure 7.8. Remove inner cover.

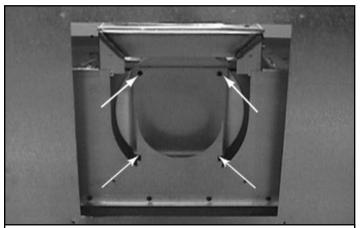
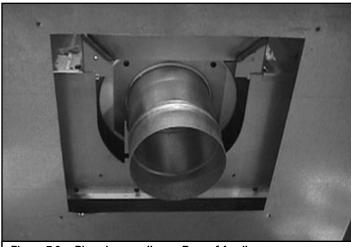


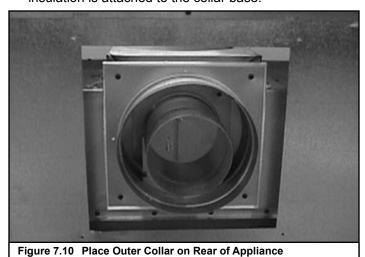
Figure 7.8 **Remove Inner Cover Plate**

Place inner collar on appliance back and replace four screws to hold this collar in place. See Figure 7.9. Make sure insulation is attached to the collar base!



Place inner collar on Rear of Appliance Figure 7.9

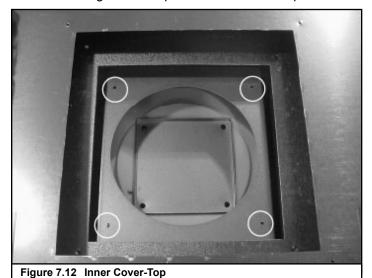
Place outer collar on rear of appliance and replace four screws to hold collar in place. See Figure 7.10. Make sure insulation is attached to the collar base!



Locate the cover plate removed in the second step. Place plate around rear vented collars and replace four screws to hold plate in place. See Figure 7.11.



Place inner cover plate on appliance top and replace four screws to hold inner cover plate in place. See Figure 7.12. Make sure gasket is replaced with the cover plate!



Place outer cover plate on appliance top and replace four screws to hold outer cover plate in place. See Figure 7.13. Make sure insulation is replaced with cover plate!



Locate heat shield cover plate removed in the first step. Place the heat shield cover plate on top of heat shield. Replace four screws to hold this plate in place. See Figure 7.14.



Locate outer shell cover removed in the sixth step (Figure 7.6). Place the cover on top of appliance. See Figure 7.15. Replace four screws to hold plate in place. See Figure 7.16.

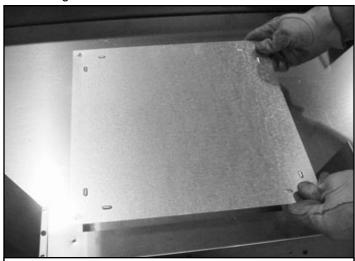


Figure 7.15 Place Cover Plate on Top of Appliance



 The appliance should look like the one shown in Figure 7.17 after it has been converted to a rear vent appliance.



B. Securing and Leveling the Appliance



WARNING

Fire Risk!

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

The diagram shows how to properly position, level, and secure the appliance (see Figure 7.18). Nailing tabs are provided to secure the appliance to the framing members.

- Rear venting refer to Vent Clearances and Framing (Section 6) for hole location.
- Place the appliance into position.
- Level the appliance from side to side and front to back.
- Shim the appliance as necessary. It is acceptable to use wood shims.
- · Bend out nailing tabs on each side.
- Keep nailing tabs flush with the framing.
- Secure the appliance to the framing by using nails or screws through the nailing tabs.

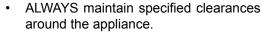
CAUTION

Do NOT notch into the framing around the appliance spacers.



WARNING

Fire Risk!



 Do NOT notch into the framing around the appliance spacers.

Failure to keep insulation, framing or other material away from the appliance may cause fire.

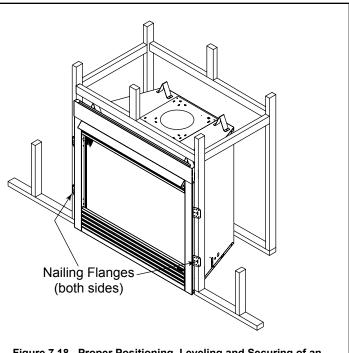


Figure 7.18 Proper Positioning, Leveling and Securing of an Appliance

8

Installing Vent Pipe

A. Assemble Vent Sections

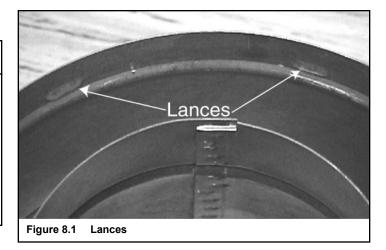


A

WARNING

Fire Risk Exhaust Fumes Risk

- <u>\(\) \(\) \(\) \(\) \(\)</u>
- Overlap pipe slip sections at least 1-1/2 in.
- · Use pilot holes for screws.
- Screws must not exceed 1 in. long.
- Pipe may separate if not properly joined.



Attaching Vent to the Firebox Assembly

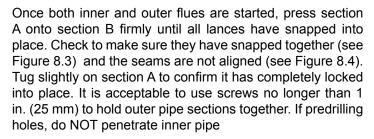
To attach the first pipe section to the collars, slide the male end of the inner vent of the pipe section over the inner collar on the firebox assembly. At the same time, slide the outer flue over the outer collar on the appliance. Push the pipe section into the appliance collar until all the lances (see Figure 8.1) have snapped in place. Tug slightly on the section to confirm it has completely locked into place.

Assemble Pipe Sections

Insert the inner flue of section A into the flared inner flue of section B.

Start the outer flue of section A over the outer flue of section B (see Figure 8.2).

Note: The end of the pipe sections with the lances/tabs on it will face towards the appliance.



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 in. (25 mm). If predrilling holes, do NOT penetrate inner pipe.

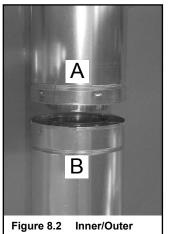
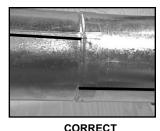


Figure 8.3

Figure 8.3 Snapped

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





_

INCORRECT

Figure 8.4 Seams

Assemble Minimum Installation (MI) Sections

MI sections are non-unitized so that they can be cut to a certain length. Cut these sections to length from the non-expanded end (see Figure 8.5).

They can then be attached by first connecting the expanded end of the MI inner flue with the inner pipe from the adjacent pipe section and securing with three screws. The expanded portion of the MI inner flue must overlap completely with the unexpanded end of the adjacent pipe section.

The outer flue can then be inserted into the adjacent outer flue expanded end and attached to the next pipe section with three screws. The other end of the MI pipe section can then be attached by fitting another pipe section to it and snapping it together, as normal.

Assemble Slip Sections

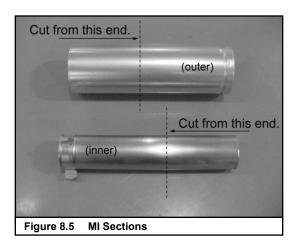
The outer flue of the slip section should slide over the outer flue of the pipe section and into (inner flue) the last pipe section (see Figure 8.6).

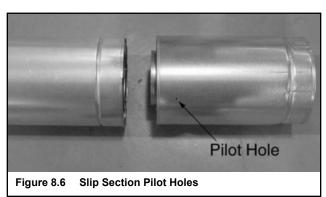
Slide together to the desired length, making sure that a 1-1/2 in. outer flue overlap is maintained between the pipe section and slip section.

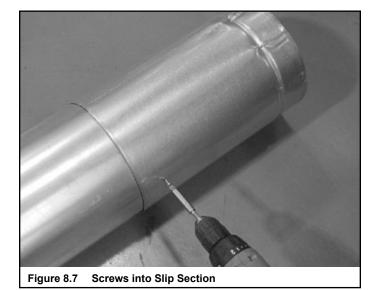
The pipe and slip section need to be secured by driving two screws through the overlapping portions of the outer flues using the pilot holes (see Figure 8.7).

This will secure the slip section to the desired length and prevent it from separating. The slip section can then be attached to the next pipe section.

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







Secure the Vent Sections

Vertical sections of pipe must be supported every 8 ft after the 25 ft maximum unsupported rise. The vent support or plumber's strap (spaced 120° apart) may be used to do this (see Figures 8.8 and 8.9).

Horizontal sections of vent must be supported every 5 ft with a vent support or plumber's strap.

B. Disassemble Vent Sections

To disassemble any two pieces of pipe, rotate either section (see Figure 8.10), so that the seams on both pipe sections are aligned (see Figure 8.11). They can then be carefully pulled apart.

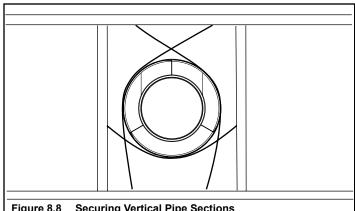


Figure 8.8 **Securing Vertical Pipe Sections**



WARNING

Fire Risk **Explosion Risk Asphyxiation Risk**



Use vent run supports per installation instructions.

Connect vent sections per installation instructions



- Maintain all clearances to combustibles.
- Do NOT allow vent to sag below connection point to appliance.

Improper support may allow vent to sag or separate.

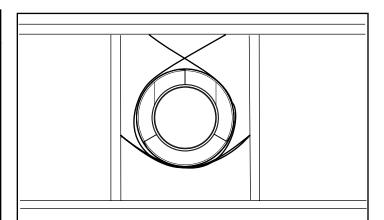
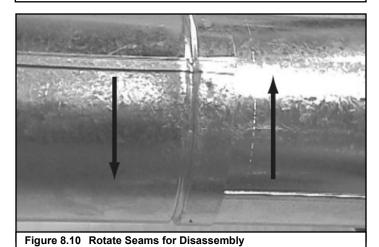


Figure 8.9 **Securing Horizontal Pipe Sections**



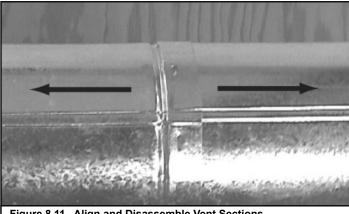


Figure 8.11 Align and Disassemble Vent Sections

C. Install the Heat Shield and Horizontal Termination Cap



WARNING

Fire Risk

Impaired performance of appliance.

- Telescoping flue section of termination cap MUST be used when connecting pipe section to termination cap.
- Maintain a 1-1/2 in. minimum overlap on telescoping flue section of termination cap.



WARNING

Fire Risk

Exhaust Fumes Risk

Impaired performance of appliance.



- Overlap pipe slip sections at least 1-1/2 in.
- Use pilot holes for screws.
- Screws must not exceed 1 in. long.
- Pipe may separate if not properly ioined.

Heat Shield Requirements for Horizontal Termination

For all horizontally vented appliances, a heat shield MUST be placed 1 in. above the top of the vent between the wall shield and the base of the termination cap.

There are two sections of the heat shield. One section attaches to the wall shield firestop with two screws. The remaining section is attached to the cap in the same manner.

If the wall thickness does not allow the required 1-1/2 in. heat shield overlap, an extended heat shield must be used.

The extended heat shield will need to be cut to the thickness of the wall and be attached to the wall shield firestop. The small leg on the extended heat shield should rest on the top of the vent (pipe section) to properly space it from the pipe section (see Figure 8.12).

Install the Horizontal Termination Cap

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.

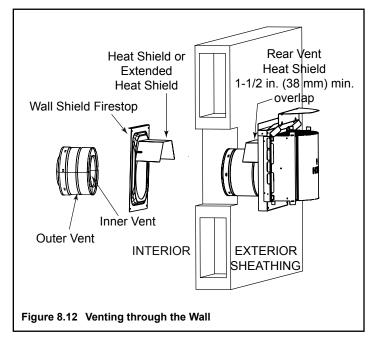
When installing a horizontal termination cap, follow the cap location guidelines as prescribed by current ANSI Z223.1 and CAN/CGA-B149 installation codes.



WARNING

Burn Risk

Local codes may require installation of a cap shield to prevent anything or anyone from touching the hot cap.



Note: Where required, an exterior wall flashing is available.

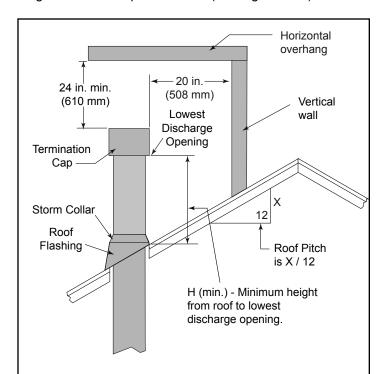
When penetrating a brick wall, a brick extension kit is

available for framing the brick.

D. Install Roof Flashing and Vertical Termina- E. Assemble and Install Storm Collar tion Cap

To install roof flashing see Figure 8.13.

For installation of vertical termination cap see minimum vent heights for various pitched roofs (see Figure 8.13).

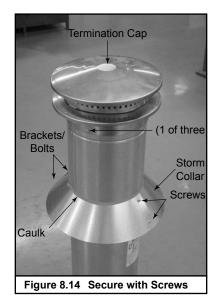


Roof Pitch H (M	in.) Ft.	Roof Pitch	H (Mi	in.) Ft.
Flat to 6/12	1.0*	Over 11/12 to	12/12	4.0
Over 6/12 to 7/12	1.25*	Over 12/12 to	14/12	5.0
Over 7/12 to 8/12	1.5*	Over 14/12 to	16/12	6.0
Over 8/12 to 9/12	2.0*	Over 16/12 to	18/12	7.0
Over 9/12 to 10/12	2.5	Over 18/12 to	20/12	7.5
Over 10/12 to 11/12	3.25	Over 20/12 to	21/12	8.0
* 3 1	t. minimun	n in snow regions		

Figure 8.13 Minimum Height from Roof to Lowest Discharge Open-

To attach the vertical termination cap, slide the inner collar of the cap into the inner flue of the pipe section and place the outer collar of the cap over the outer flue of the pipe section.

Secure with three screws into the outer flue. Secure the cap by driving the 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 8.14).



CAUTION

Sharp Edges!

Wear protective gloves and safety glasses during installation.



Connect both halves of the storm collar with two screws (see Figure 8.15).

Wrap the storm collar around the exposed pipe section and align brackets. Insert a bolt (provided) through the brackets and tighten nut to complete the storm collar assembly (see Figure 8.16). Make sure the collar is tight against the pipe section.

Slide the assembled storm collar down the pipe section until it rests on the roof flashing (see Figure 8.13).

Caulk around the top of the storm collar (see Figure 8.14).

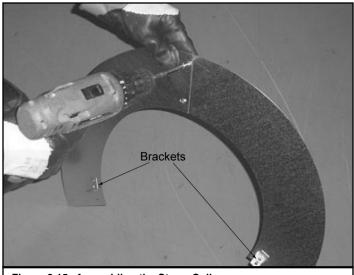


Figure 8.15 Assembling the Storm Collar



Figure 8.16 Assembling the Storm Collar Around the

Gas Information

A. Fuel Conversion

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

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

B. Gas Pressure

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





WARNING

Fire Risk **Explosion Risk**

High pressure will damage valve.



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





WARNING

Fire Risk **Explosion Risk**

Verify inlet pressures.



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

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

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

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

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

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

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

C. Gas Connection

Note: Gas line may be run from either side or through the bottom of appliance through the gas knockouts provided.





Gas Leak Risk

WARNING

Support control when attaching pipe to prevent bending gas line.

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

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

Ensure that gas line does not come in contact with outer wrap of appliance. Follow local codes.



WARNING



Fire Risk **Explosion Risk**



- Gas build-up during line purge may ignite.
- Purge should be performed by qualified technician.
- Ensure adequate ventilation.
- Ensure there are no ignition sources such as sparks or open flames.
- Incoming gas line should be piped into the valve compartment and connected to the 1/2 in. connection on the manual shutoff valve.
- A small amount of air will be in the gas supply lines. When first lighting appliance it will take a short time for air to purge from lines. When purging is complete the appliance will light and operate normally.





WARNING

CHECK FOR GAS LEAKS Fire Risk **Explosion Risk Asphyxiation Risk**



- Check all fittings and connections.
- Do not use open flame.



After the gas line installation is complete, all connections must be tightened and checked for leaks with a commercially available, non-corrosive leak check solution. Be sure to rinse off all leak check solution following testing.

Fittings and connections may have loosened during shipping and handling.



WARNING

Fire Risk

Do NOT change the valve settings.

- This valve has been preset at the factory.
- Changing valve settings may result in fire hazard or bodily injury.

D. High Altitude Installations

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

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

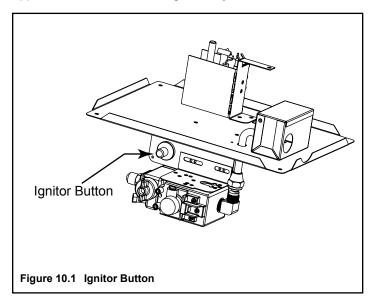
If installing this appliance at an elevation above 4500 ft (in Canada), check with local authorities.

Electrical Information

A. Recommendation for Wire

This appliance requires 110-120 VAC to be wired to the junction box either for use of optional accessories (standing pilot ignition) or for proper operation of the appliance (Intellifire ignition). Refer to Figure 10.1 to determine if the appliance uses an Intellifire ignition system or standing pilot ignition system.

Open the control access panel to view wiring system and gas valve. If this appliance has a red or black ignitor button (as noted in Figure 10.1) this appliance has a standing pilot ignition system. If there is no red or black ignitor button, this appliance has an Intellifire ignition system.



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

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

C. Intellifire Ignition System Wiring

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

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

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

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

CAUTION

Battery polarity must be correct or module damage will occur.

B. Connecting to the Appliance



WARNING

Shock Risk Explosion Risk

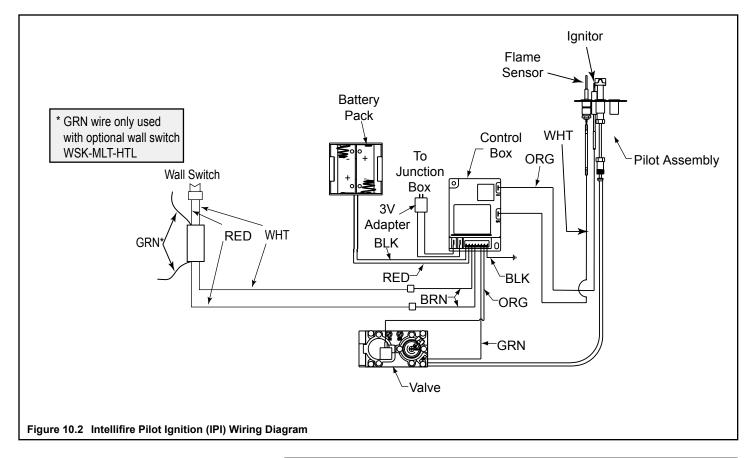
Do NOT wire 110V to valve.

Do NOT wire 110V to wall switch

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

Optional Accessories Requirements

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



D. Standing Pilot Ignition System Wiring

- This standing pilot ignition system wiring does not require a 110 VAC supply to operate. A wiring diagram is shown in Figure 10.3.
- It is recommended that a 110 VAC junction box be installed for use with a fan or remote control. (See Figure 10.4 for junction box wiring.)

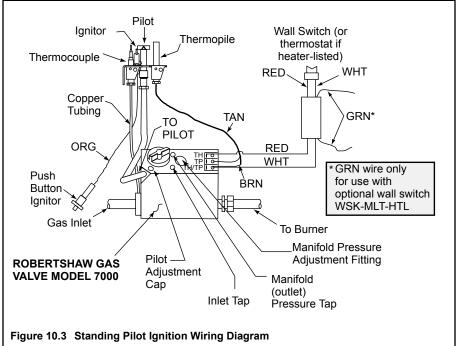
Note: Do not wire 110V to the millivolt valve (standing pilot)! This will damage the valve.

CAUTION

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

Optional Accessories Requirements

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





▲WARNING

Shock Risk

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

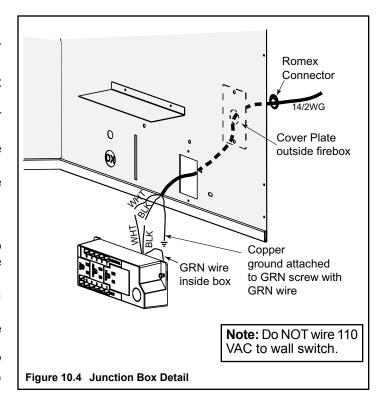
E. Junction Box Installation

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

- Remove the cover plate located on the outer shell right side (see Figure 10.4).
- Install the supplied Romex[™] connector in the cover plate.
- Feed the necessary length of wire through the connector.
- Make all necessary wire connections and reattach the cover plate to the outer shell.

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

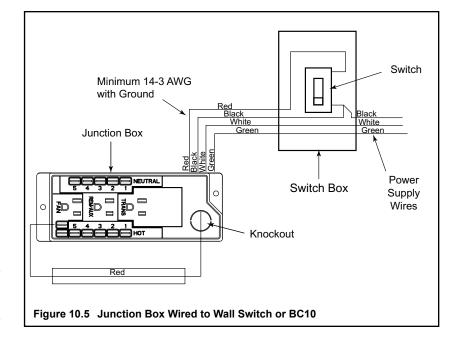
- Remove the screw attaching the junction box/receptacle to the outer shell, rotate the junction box inward to disengage it from the outer shell (see Figure 10.4).
- Pull the electrical wires from outside the appliance through this opening into the valve compartment.
- Feed the necessary length of wire through the connector.
- Make all necessary wire connections to the junction box/ receptacle and reassemble the junction box/receptacle to the outer shell.



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 10.5):

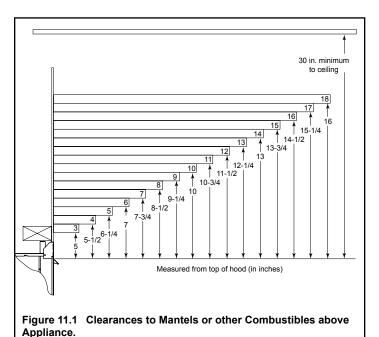
- The power supply for the appliance must be brought into a switch box.
- The power can then be supplied from the switch box to the appliance using a minimum of 14-3 with ground wire.
- At the switch box connect the black (hot) wire and red (switch leg) wire to the wall switch as shown.
- At the appliance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

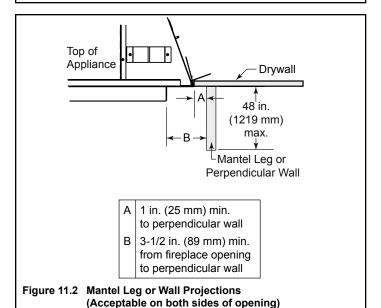


Finishing

A. Mantel Projections

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







WARNING

Fire Risk **Explosion Risk**



- Facing and/or finishing materials must never overhang into the glass opening.
- Overhanging materials may ignite.
- May interfere with proper operation of glass assembly.

B. Facing Material

WARNING

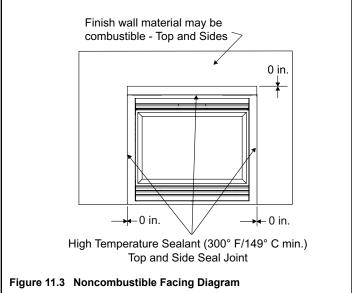
Fire Risk

Do NOT obstruct air inlet or outlet grilles. Do NOT modify arilles.

Modifying or covering grilles could cause temperature rise and fire hazard.

Finishing materials must not interfere with:

- Air flow through grilles or louvers.
- Operation of louvers or doors.
- Access for service.





WARNING

Fire Risk

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

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

12 Appliance Setup

A. Remove Glass Assembly

See Section 12.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. Refer to Section 16.

WARNING

Shock Risk Fire Risk

Use ONLY optional accessories approved for this appliance.



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

E. Install the Refractory

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



WARNING

Explosion Risk

- Follow rockwool placement instructions in this manual.
- Do NOT place rockwool directly over burner ports.
- Replace rockwool material annually. Improperly placed rockwool interferes with proper burner operation.

F. Lava Rock, Vermiculite, Rockwool Placement

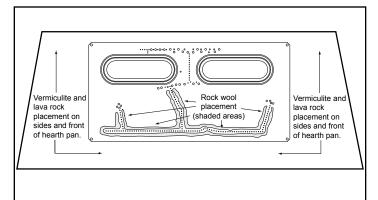


Figure 12.1 Placement of Lava Rock, Vermiculite, Rockwool

Place the lava rock and vermiculite.

- See Figures 12.1 12.3.
- It is not necessary to use the entire bag. Save the remaining amount for future use.



Figure 12.2 Placement of Lava Rock

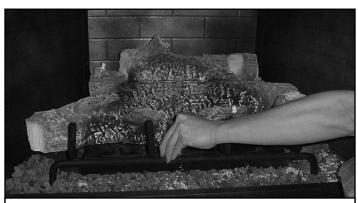


Figure 12.3 Placement of Vermiculite

Place the rockwool.

- See Figures 12.1 and 12.4.
- Place a small amount of 1/2 in. diameter pieces (dime-size) of rockwool on the burner pan so that rockwool touches but does not cover the holes in the burner pan.
- It is not necessary to use the entire bag. Save the remaining amount for future use.



Figure 12.4 Placement of Rockwool

G. Log Assembly

 Base logs have been permanently mounted on the grate assembly and should not be moved. See Figure 12.5.



Figure 12.5 Base Logs

Install "Y" log on left hand side of grate using locating pins to position. See Figure 12.6



Figure 12.6 Placing Left Top Log

 Install right top log as shown in Figure 12.7 using locating pins to position log properly.



Figure 12.7 Placing Right Top Log

H. Glass Assembly



MARNING

Handle glass doors with care.

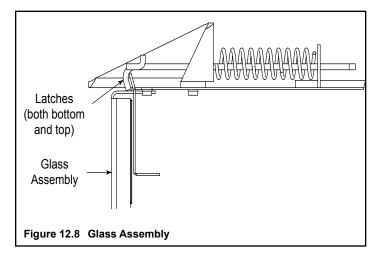
- Inspect the gasket to ensure it is undamaged.
- Inspect the glass for cracks, chips or scratches.
- Do NOT strike, slam or scratch glass.
- Do NOT operate appliance with glass door removed, cracked, broken or scratched.
- Replace glass door assembly as a complete assembly.

Removing Glass Assembly

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

· Replacing Glass Assembly

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



I. Grilles and Trim

- Install optional marble and brass trim surround kits using the installation instructions included with them.
- Marble, brass, brick, tile or other non-combustible materials can be used to cover gap between sheet rock and appliance.
- Do not obstruct or modify the air inlet/outlet grilles.
- Allow space to lower and remove the bottom grille/access panel.

J. Hood

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

K. Air Shutter Setting

This appliance has an adjustable air shutter (which controls the primary air mixture) that can be accessed from under the valve compartment located under the firebox assembly (see Figure 12.9). If your installation has more than the minimum vertical vent length, adjustments to the air shutter may be required to obtain the optimal flame appearance. A qualified installer should adjust this at the time of installation.

It takes 16 full turns of the shutter adjustment handle to move the air shutter from fully open to fully closed. In the event of soot accumulation inside your appliance, the air shutter should be opened further. When the shutter adjustment handle is all the way **down**, the air shutter is in the **closed** position. When the shutter adjustment handle is all the way **up**, the air shutter is in the fully **open** position.

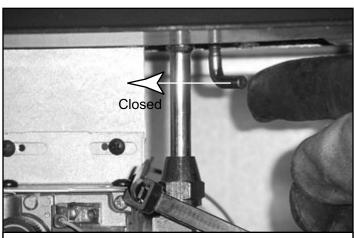


Figure 12.9 Air Shutter

Operating Instructions

A. Before Lighting Appliance

Before lighting this appliance, determine if it has a standing pilot or Intellifire ignition system by opening the control access panel to view wiring system and gas valve. If this appliance has a red or black ignitor button (See Figure 10.1) this appliance has a standing pilot ignition system. If there is no red or black ignitor button, this appliance has an Intellifire ignition system.

CAUTION

If installing Intellifire Ignition battery backup:

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

Before operating this appliance, have a qualified technician:

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



WARNING

Fire Risk Asphyxiation Risk



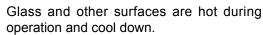
Glass door MUST be in place when appliance is operating. Do NOT operate appliance with glass door removed.

- Open viewing glass for servicing only.
- Glass door MUST be in place and sealed before operating appliance.
- Only use glass doors certified for use with the appliance.
- Glass replacement should be done by qualified technician.



M WARNING

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



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

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

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



WARNING

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



▲ WARNING

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

This appliance must be installed in accordance with

adequate combustion and ventilation air.

This appliance needs fresh air for safe operation and must be installed so there are provisions for local codes, if any; if not, follow ANSI Z223.1 or, in

Canada, current CAN/CGA-B149.

FOR YOUR SAFETY READ BEFORE LIGHTING

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

This appliance is equipped with an ignition device which

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automatically lights the pilot. Do not try to light the pilot by hand. gas. Be sure to smell next to the floor because some gas is BEFORE LIGHTING smell all around the appliance area for heavier than air and will settle on the floor.

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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.
- knob will not move by hand, don't try to repair it, call a qualified Use only your hand to push in and move the gas control valve service technician. Force or attempted repair may result in a or turn the gas control knob. Never use tools. If the lever or fire or explosion.
 - 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. Do not use this appliance if any part has been under water. \Box

This appliance must be properly connected to a venting system in accordance with the

manufacturer's installation instructions.

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

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

WARNING RISK OF FIRE

fuel only. Do not attempt to use with solid wood fuel or another type of fuel. Do not attempt to modify or This appliance is intended to burn a specified gas use any other type of gas burner system. WARNING: Disconnect the electric power supplied with the appliance must be replaced, it must before servicing. If for any reason the original wire be replaced with 105° C or its equivalent.

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

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

LIGHTING INSTRUCTIONS

- Follow "B" in the safety information above on this label. If you don't smell Wait five minutes to clear out any gas. If you then smell gas, STOP! gas, go to the next step. 5. Turn wall switch to the "OFF" position or thermostat to the STOP! Read the safety information above on this label.
- To turn on the burner, turn on all electric power to this appliance and turn on the wall switch or set the thermostat to the desired setting. If the appliance will not operate, follow the instructions "TO TURN OFF

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automatically lights the pilot. Do NOT try to light the pilot by

This appliance is equipped with an ignition device which

Turn off all electric power to the appliance.

ക. 4.

GAS TO APPLIANCE" and call your service technician or gas supplier. ۲.

TO TURN OFF GAS TO APPLIANCE

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

keep burner and control compartment clean. See installation and operating instructions accompanying the appliance. Due to high surface temperatures, keep children, clothing and furniture away.

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FOR YOUR SAFETY READ BEFORE LIGHTING

explosion may result causing property damage, personal WARNING: If you do not follow these instructions exactly, a fire or

iniury or loss of life.

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BEFORE LIGHTING smell all around the appliance area for gas. This appliance has a pilot which must be lighted by hand. When Be sure to smell next to the floor because some gas is heavier lighting the pilot, follow these instructions exactly. than air and will settle on the floor. œ.

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- WHAT TO DO IF YOU SMELL GAS Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- Use only your hand to push in or turn knob. Never use tools. If the manual gas valve will not push in or turn by hand, don't try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion
- appliance and to replace any part of the control system and any Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the gas control which has been under water

o.

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air. This appliance must be installed in accordance with ocal codes, if any; if not, follow ANSI Z223.1 or, in Canada, current CAN/CGA-B149.

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

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

WARNING RISK OF FIRE This appliance is intended to burn a specified gas

gasoline and other liquids having flammable vapors

not touch. Keep children, clothing, furniture,

CAUTION: Hot while in operation. Do

supplied with the appliance must be replaced, it must be WARNING: Disconnect the electric power fuel only. Do not attempt to use with solid wood fuel or another type of fuel. Do not attempt to modify or before servicing. If for any reason the original wire use any other type of gas burner system

For use with natural gas or propane. A conversion replaced with 105° C or its equivalent

kit as supplied by the manufacturer shall be used to convert this appliance to the alternative fuel

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

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LIGHTING INSTRUCTIONS

Stop! Read the safety information above on this label.

Turn wall switch to the "OFF" position or thermostat to the Remove control access panel lowest setting.

Turn manual gas valve to CLOSED. Wait five [5] minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to next step.

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Turn gas line to "OPEN".

Furn pilot knob clockwise A to "OFF". (Knob may have to be

 ocate pilot assembly inside appliance. depressed to pass "PILOT" position.)

-ocate red ignitor button.

Furn pilot knob to "PILOT" and push in.

Continue to hold in pilot knob and push the red ignitor button 12-15 times until small blue pilot flame appears. 9.6.89

Continue to hold in pilot knob for approximately one minute. Pilot should remain lit. If pilot goes out, wait 5 minutes and repeat Steps 3-9 6. 7. 4

3. CLOSED 4. OPEN

Refease and furn knob counterclockwise to "ON". If appliance will not operate, follow the instructions "TO TURN OFF GAS TO APPLIANCE" and call your service technician or

gas supplier. E: To light main burner, tum wall switch to "ON". Do not light by Š TO TURN OFF GAS TO APPLIANCI

Turn off wall switch or set thermostat to lowest setting.

Remove control access panel.

Tum manual gas valve to "CLOSED position. Do not force

Replace control access panel

Due to high surface termperatures, keep children, clothing and fumiture away. Keep bumer and control compartment clean. See installation and operating instructions accompanying the appliance.

4. 7.

C. After the Appliance is Lit

Initial Break-in Procedure

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

Note: This appliance should be run three to four hours on the initial start-up. Turn it off and let it cool completely. Remove and clean the glass. Replace the glass and run the appliance for an additional 12 hours. This will help cure the products used in the paint and logs.

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



WARNING

Fire Risk

High Temperatures

Keep combustible household items away from appliance.

Do NOT obstruct combustion and ventilation air.

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

CAUTION

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

CAUTION

Smoke and odors are released during initial operation.

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

Smoke and odors may be irritating to sensitive individuals.



WARNING

Fire Risk

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

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

Combustible materials may ignite.

D. Frequently Asked Questions

	Issue		Solutions
1.	Condensation on the glass.	1.	This is a result of gas combustion and temperature variations. As the appliance warms, this condensation should disappear.
2.	Blue flames.	2.	This is a result of normal operation and the flames will begin to yellow as the appliance is allowed to burn for 20-40 minutes.
3.	Odor from appliance.	3.	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 any oils remaining from manufacturing.
4.	Film on the glass.	4.	This is a normal result of the curing process of the paint and logs. Glass should be cleaned within 3-4 hours of initial burning to remove deposits left by oils from the manufacturing process. A non-abrasive cleaner such as a gas fireplace glass cleaner may be necessary. See your dealer.
5.	Metallic noise.	5.	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.
6.	Is it normal to see the pilot flame burn continually?	6.	In an Intellifire ignition system it is normal to see the pilot flame, but it should turn off when ON/OFF switch is turned off. In a standing pilot system the pilot will always stay on.

14. Troubleshooting

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

A. Standing Pilot Ignition System

	Symptom	Possible Causes		Corrective Actions
1.	After repeated triggering of the red or black piezo ignitor button, the spark ignitor will not light the pilot.	A.	Defective ignitor.	Check the spark at the electrode and pilot. If there is no spark and the electrode wire is properly connected, replace the ignitor.
		B.	Defective pilot or misaligned electrode (spark at electrode).	Using a match, light the pilot. If the pilot lights, turn off the pilot and trigger the red piezo ignitor button again. If the pilot lights, an improper gas/air mixture caused the bad lighting and a longer purge period is recommended. If the pilot will not light, ensure the gap at the electrode and pilot is 1/8 in. to have a strong spark. If the gap is OK, replace the pilot.
		C.	No gas or low gas pressure.	Check the remote shut-off valves from the appliance. There is usually a valve near the gas main. There can be more than one valve between the appliance and the main.
		D.	No LP in tank.	Check the LP (propane) tank. You may be out of fuel.
2.	The pilot will not stay lit after carefully following	A.	Defective thermocouple.	Check that the pilot flame impinges on the thermocouple. Clean and/or adjust the pilot for maximum flame impingement.
	the lighting instructions			Ensure that the thermocouple connection at the gas valve is fully inserted and tight (hand tighten plus 1/4 turn).
				Disconnect the thermocouple from the valve, place one millivolt meter lead wire on the tip of the thermocouple and the other meter lead wire on the thermocouple copper lead. Start the pilot and hold the valve knob in. If the millivolt reading is less than 15mV, replace the thermocouple.
		B.	Defective valve.	If the thermocouple is producing more than 15 millivolts, replace faulty valve.
3.	The pilot is burning, there is no gas burning, the valve knob is in the ON position, and the ON/ OFF switch is in the ON position.	A.	ON/OFF switch or wires are defective.	Check the ON/OFF switch and wires for proper connections. Place the jumper wires across the terminals at the switch. If the burner comes on, replace the defective switch. If the switch is OK, place the jumper wires across the switch wires at the gas valve. If the burner comes on, the wires are faulty or connections are bad.
		В.	Thermopile may not be generating sufficient millivoltage.	If the pilot flame is not close enough physically to the thermopile, adjust the pilot flame.
				Be sure the wire connections from the thermopile at the gas valve terminals are tight and that the thermopile is fully inserted into the pilot bracket.
				Check the thermopile with a millivolt meter. Take the reading at TH-TP&TP terminals of the gas valve. The meter should read 325 millivolts minimum while holding the valve knob depressed in the pilot position, with the pilot lit, and the ON/OFF switch in the OFF position. Replace the faulty thermopile of the reading is below the specified minimum.
				With the pilot in the ON position, disconnect the thermopile leads from the valve. Take a reading at the thermopile leads. The reading should be 325 millivolts minimum. Replace the thermopile if the reading is below the minimum.
		C.	Defective valve.	Turn the valve knob to the ON position. Place the ON/OFF switch in the ON position. Check the millivolt meter at the thermopile terminals. The millivolt meter should read greater than 125mV. If the reading is acceptable, and if the burner does not come on, replace the gas valve.
		D.	Plugged burner orifice.	Check the burner orifice for stoppage. Remove stoppage.
		E.	Wall switch or wires are defective.	Follow the corrective action in Symptom and Possible Cause 1.A. above. Check the switch and wiring. Replace where defective.

(A. Standing Pilot Ignition System Troubleshooting con't)

	Symptom	Possible Causes		Corrective Actions
4.	Frequent pilot outage problem.	A.	Pilot flame may be too high, too low, or blowing (high), causing pilot safety to drop out.	Clean and adjust the pilot flame for maximum flame impingement on thermocouple. Follow lighting instructions carefully.
5.	The pilot and main burner extinguish while in operation.	A.	No LP in the tank.	Check the LP (propane) tank. Refill the fuel tank.
		B.	Inner vent pipe is leaking exhaust gases back into the system.	Check venting system for damage. Replace/repair improperly assembled pipe sections.
		C.	Glass panel loose or gasket worn.	Replace glass panel assembly.
		D.	Bad thermopile or thermocouple.	Replace if necessary.
		E.	Improper vent cap installation.	Check for proper installation and freedom from debris or blockage.
6.	Glass soots.	A.	Flame impingement.	Adjust the log set so that the flame does not excessively impinge on it.
		B.	Improper air shutter setting.	Adjust the air shutter located on the control panel.
		C.	Debris around air shutter.	Inspect the opening at the base of the burner. NO MATERIAL SHOULD BE PLACED IN THIS OPENING.
7.	Flame burns blue and lifts	A.	Insufficient oxygen being	Ensure that the vent cap is installed properly and free of debris.
	off burner.		supplied.	Ensure that the vent system joints are tight and have no leaks.
				Ensure that no debris has been placed at the base of, or in the area of the air holes in the center of, the base pan beneath the burner.
				Ensure that the glass is tightened properly on the appliance, particularly on top corners.

B. Intellifire Ignition System

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

(B. Intellifire Ignition System Troubleshooting con't)

	Symptom		Possible Causes	Corrective Actions
4.	Pilot sparks, but pilot will not light.	A.	Correct gas supply.	Verify that incoming gas line ball valve is "open". Verify that inlet pressure reading is within acceptable limits, inlet pressure must not exceed 14 in. w.c.
		B.	Ignitor gap is too large.	Verify that spark gap from ignitor to pilot hood is .17 in. or 1/8 in.
		C.	Module is not grounded.	Verify module is securely grounded to metal chassis of appliance.
		D.	Module voltage output/ valve/pilot solenoid ohms readings.	Verify battery voltage is at least 2.7 volts. Replace batteries if voltage is below 2.7.

Maintaining and Servicing the Appliance

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



WARNING

Risk of injury or property damage

Before servicing:

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

After Servicing:

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





WARNING

Annual inspection by qualified technician recommended.

Check:



- Condition of doors, surrounds and fronts.
- Condition of glass, glass assembly and glass
- Obstructions of combustion and ventilation



- Condition of logs.
- Condition of firebox.
- Burner ignition and operation.
- Burner air shutter adjustment.
- Gas connections and fittings.
- Obstructions of termination cap.

Clean:

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

Risk of:

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



CAUTION

Handle glass assembly with care.

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

When cleaning glass door:

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

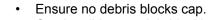
Refer to maintenance instructions.

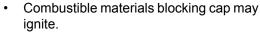


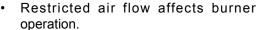
WARNING

Fire Risk **Explosion Risk**

Inspect external vent cap regularly.









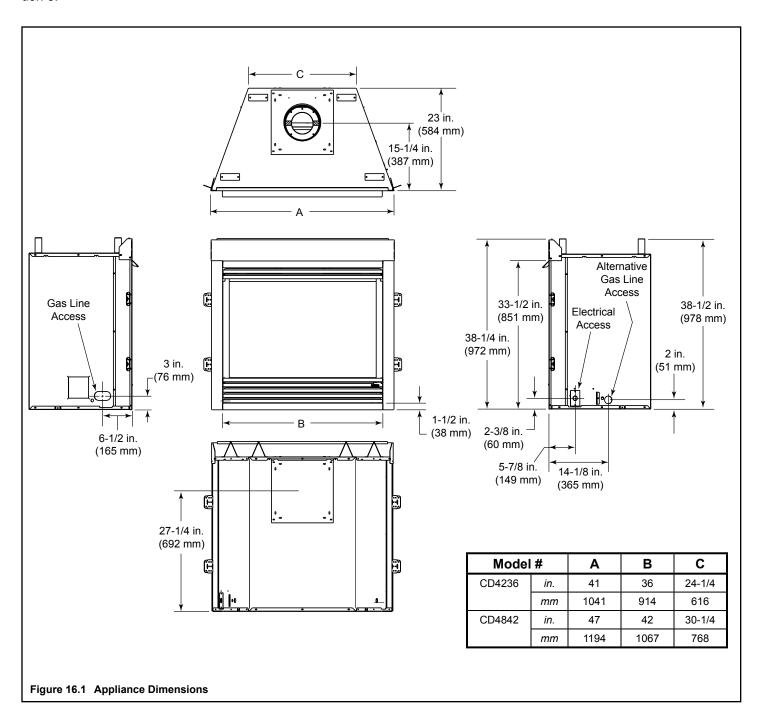
Maintenance and Service Tasks:

Inspect	Maintenance Tasks
Doors, surrounds and fronts	 Access condition of screen and replace as necessary. Recommend addition of screen if one is not present.
	Inspect for scratches, dents or other damage and repair as necessary.
	Verify no obstructions to airflow through the louvers.
	Verify proper clearance to combustible household objects is maintained.
Gasket seal, glass assembly and glass	Inspect gasket seal and its condition.
	Inspect glass panels 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 latches engage properly, clip studs are not stripped, and glass attachment components are intact and operating properly. Replace as necessary.
	 Clean glass using a nonabrasive cleaner such as Brasso®. Replace glass assembly if severely coated with silicate deposits that cannot be removed.
Valve compartment and firebox top	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 any foreign objects.
	Verify unobstructed air circulation.
Logs	Inspect for broken, damaged, or missing logs. Replace as necessary.
	Verify correct log placement and no flame impingement causing sooting. Correct as necessary.
Firebox	Inspect for paint condition, warpage, corrosion or perforation. Sand and repaint as necessary.
	Replace appliance if firebox has been perforated.
Burner ignition and operation	Verify burner is properly secured and aligned with pilot or ignitor.
	 Clean off burner top, inspect for plugged ports, corrosion or deterioration. Replace burner if necessary.
	 Replace rockwool with new dime-sized and shaped pieces. Do not block ports or obstruct lighting paths.
	4. Check for smooth lighting and ignition carryover to all ports. Verify there is no ignition delay.
	Inspect for lifting or other flame problems.
	6. Verify air shutter is clear of dust and debris.
	7. Inspect orifice for soot, dirt or corrosion.
	Verify manifold and inlet pressures. Adjust regulator as required.
	Inspect pilot flame strength. Clean or replace orifice as necessary.
	 Inspect thermocouple/thermopile or IPI sensor rod for soot, corrosion and deterioration. Clean with emery cloth or replace as required.
	11. Verify millivolt output. Replace as necessary.
Venting	Inspect venting for blockage or obstruction such as birds' nests, leaves, etc.
	Confirm that termination cap remains clear and unobstructed by plants, etc.
	 Verify that termination cap clearance to subsequent construction (building additions, decks, fences or sheds) has been maintained.
	Inspect for corrosion or separation.
	Verify weather stripping sealing and flashing remain intact.
	Inspect draft shield to verify it is not bent, damaged or missing.
Remote controls	Verify operation of remote.
	Replace batteries in remote transmitters and battery-powered receivers.
	 Verify batteries have been removed from battery back-up in IPI systems to prevent premature battery failure or leaking.

16 Reference Materials

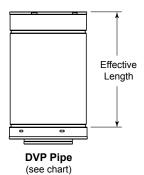
A. Appliance Dimension Diagram

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

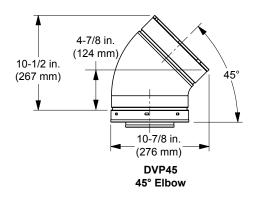


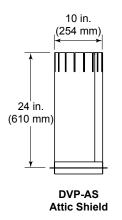
B. Vent Components Diagrams

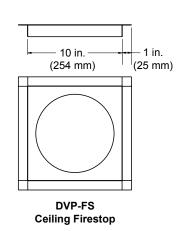
Components	Description
DVP4	4 in. length Vent Pipe
DVP6	6 in. length Vent Pipe
DVP12	12 in. length Vent Pipe
DVP24	24 in. length Vent Pipe
DVP6A	3 in 6 in. Slip Section Vent Pipe (to be used with another piece of pipe)
DVP36	36 in. length Vent Pipe
DVP48	48 in. length Vent Pipe
DVP12A	3 in 12 in. Slip Section Vent Pipe (to be used with another piece of pipe)
DVP12MI	12 in. Vent Pipe - non-unitized (can be cut to length)
DVP24MI	24 in. Vent Pipe - non-unitized (can be cut to length)
DVP45	45° Elbow
DVP90ST	90° Elbow
DVP-AS	Attic Insulation Shield
DVP-FS	Ceiling Firestop
DVP-HVS	Vent Support - Horizontal
DVP-WS	Wall shield firestop (used to ensure horizontal clearances)
RF6M	Roof Flashing (vertical termination for 0/12 to 6/12 pitch) - pack of four
RF12M	Steep Pitch Roof Flashing (for 7/12 to 12/12 pitch) - pack of six
BEK	Brick Extension Kit - 10 pcs.
DVP-BEK2	Brick Extension Kit for High Performance Cap
DVP-TRAPFL	Trap Cap Rain Flashing - qty. 4
COOL-ADDM	Cap Shield (for DVP-TRP) - pack of six
DRC-RADIUS	Cap Shield (for DVP-TRAP and DVP-HPC)
DVP-TVHW	Vertical Termination Cap (High Wind). Includes storm collar and fastener pack.
PVK-80	Power Vent Kit
DVP-TV	Vertical Termination Cap - Includes storm collar & fastener pack.
DVP-TB1	Basement/window well termination cap. Includes fastener pack.
DVP-FBHT	Fire Brick Termination Cap
DVP-TRAP	Rear Vent Horizontal Termination Cap
DVP-TRAP1	Horizontal Termination Cap with 1-7/8 in. telescoping flue, wall shield firestop with heat shield & fastener. pack.
DVP-TRAPK1	Top Vent Horizontal Kit with DVP-TRAP1 Termination Cap, wall shield firestop with heat shield, 90° elbow & fastener pack.
DVP-TRAP2	Horizontal Termination Cap with 4 in. telescoping flue, wall shield firestop with heat shield & fastener pack.
DVP-TRAPK2	Top Vent Horizontal Kit with DVP-TRAP2 Termination Cap, wall shield firestop with heat shield, 90° elbow & fastener pack.
DVP-HPC1	Horizontal Termination Cap with 2-1/8 in. telescoping flue, wall shield firestop with heat shield & fastener pack.
DVP-HPCK1-B	Vent Kit with DVP-HPC1 Termination Cap (painted beige), wall shield firestop with heat shield, 90° elbow & fastener pack.
DVP-HPC2	Horizontal Termination Cap with 4-1/8 in. telescoping flue, wall shield firestop with heat shield & fastener pack.
DVP-HPCK2-B	Vent Kit with DVP-HPC2 Termination Cap (painted beige), wall shield firestop with heat shield, 90° elbow & fastener pack.
DVP-HSM-B	Extended Heat Shield
DVP-HRC	High Rise Termination Cap
DVP-HRC-ZC	High Rise Termination Cap - Zero Clearance
4033-016	DVP-TRAP to DVP-HPC Side Filler Kit

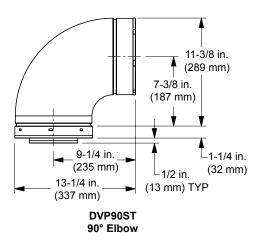


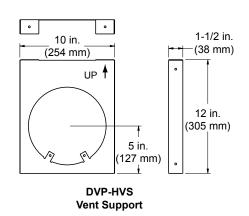
Pipe	Effective Length
DVP4	4 in. (102 mm)
DVP6	6 in. (152 mm)
DVP12	12 in. (305 mm)
DVP24	24 in. (610 mm)
DVP36	36 in. (914 mm)
DVP48	48 in. (1219 mm)
DVP6A	3 to 6 in. (76 to 152 mm)
DVP12A	3 to 12 in. (76 to 305 mm)
DVP12MI	3 to 12 in. (76 to 305 mm)
DVP24MI	3 to 24 in. (76 to 610 mm)

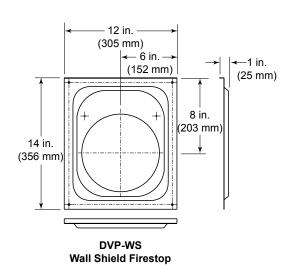


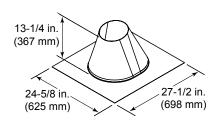




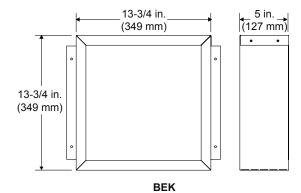




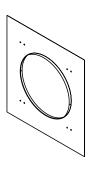




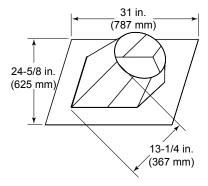
RF6M Roof Flashing Multi-pak



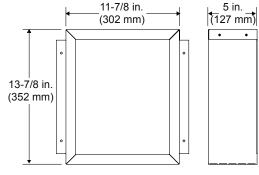
Trap Cap Brick Extension



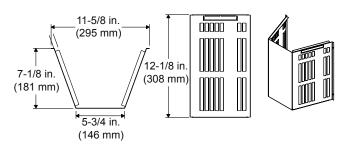
DVP-TRAPFL Flashing



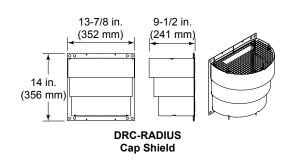
RF12M Roof Flashing Multi-pak

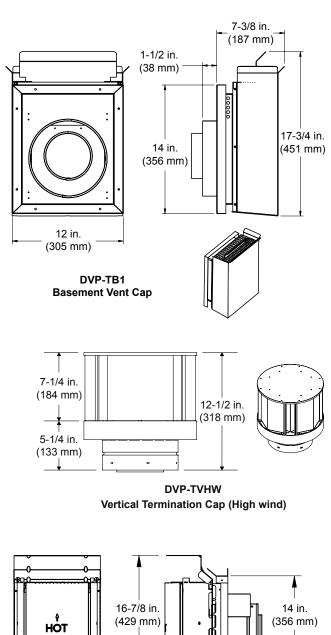


DVP-BEK2
DVP-HPC Cap Brick Extension



COOL-ADD Cap Shield





16-7/8 in. (356 mm)

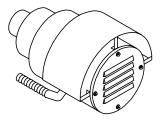
12 in. (305 mm)

7-1/8 in. (181 mm)

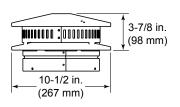
8-3/4 in. (222 mm)

1-5/8 in. (41 mm)

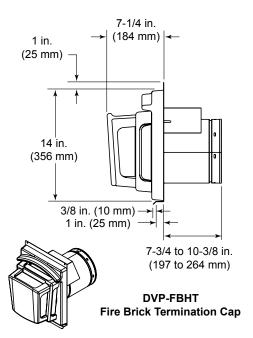
DVP-HPC High Performance Cap



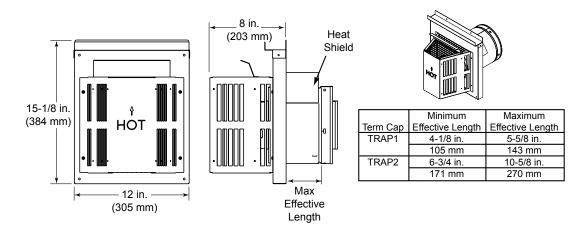
PVK-80 (For use with IPI and DSI appliances only.)



DVP-TV Vertical Termination Cap

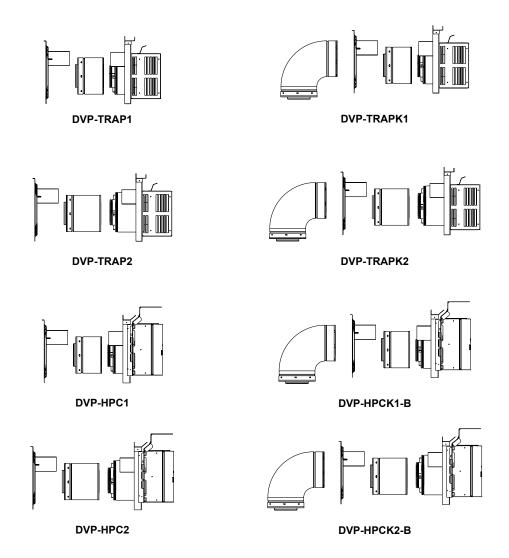


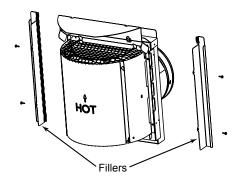
Note: Heat shields MUST overlap by a minimum of 1-1/2 in. (38 mm). **The heat shield is designed to be used on a wall 4 in. to 7-1/4 in. (102 mm to 184 mm) thick.** If wall thickness is less than 4 in. (102 mm) the existing heat shields must be field trimmed. If wall thickness is greater than 7-1/4 in.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



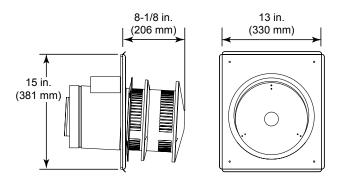
DVP-TRAP

Horizontal Termination Cap

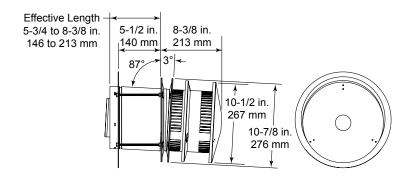




DVP-TRAP to **DVP-HPC** Side Filler Kit



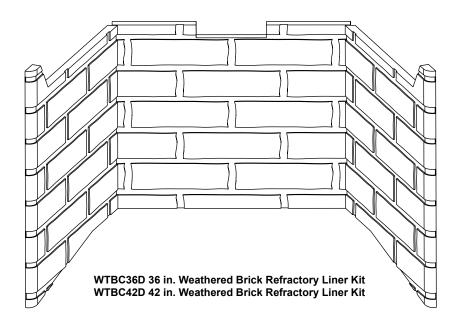
DVP-HRC For use with: ND4236, ND3933, ND3630, Aztec, Bravo, Crescent II, Soulstice

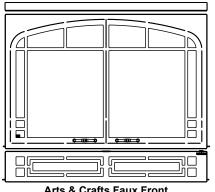


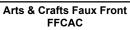
DVP-HRC-ZC For use with: ND4236, ND3933, ND3630, Aztec, Bravo, Crescent II, Soulstice

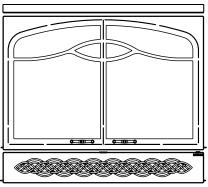
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D. Optional Components

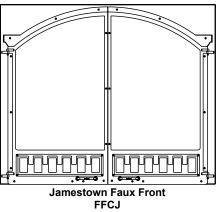








Modernist Faux Front FFCM



lating Gas Appliance

Model# Description FFCM36 Modernist-style black decorative faux front FFCM36PT Modernist-style pewter decorative faux front Modernist-style brushed nickel decorative faux FFCM36BN FFCAC36 Arts & Crafts-style black decorative faux front FFCAC36PT Arts & Crafts-style pewter decorative faux front Arts & Crafts-style brushed nickel decorative faux FFCAC36BN front FFCJ36 Jamestown-style black decorative faux front FFCJ36PT Jamestown-style pewter decorative faux front GFK4B Transaxial fan kit GFK4MB Multi-pack of 12 GFK4B transaxial fan kits GFK160B 160 CFM transaxial fan kit Multi-pack of 12 GFK160B 160 CFM transaxial GFK160MB fan kits WTBC36D 36 in. weathered refractory WSK-MLT-HTL Multi-function wall switch RC-BATT-HTL Battery operated remote control RC-SMART-HTL Remote control (requires 110v or prewiring) Multi-functional remote: ON/OFF, high/low flame, RCT-MLT-HTL room temp, fan speed Multi-functional remote: ON/OFF, room temp, SMART-STAT-HTL thermostat temp, timer Multi-functional remote: ON/OFF, thermostat SMART-BATT-HTL temp, timer LP gas conversion kit for standing pilot ignition CKVP Natural gas conversion kit for standing pilot CKVN ignition system DCKVP P gas conversion kit for Intellifire ignition system Natural gas conversion kit for Intellifire ignition DCKVN system Polished brass front trim kit (5 bars, 1 hood, 1 TK302B upper trim) Stainless steel front trim kit (5 bars, 1 hood, 1 TK302S upper trim) TKN65B Polished brass accent trim kit (2 pieces) TKN65S Stainless steel accept trim kit (2 pieces) TKN65PT Pewter accent trim kit (2 pieces) TKN65BN Brushed nickel accent trim kit (2 pieces) TK6B Polished brass louver trim kit (4 bars) TK6S Stainless steel louver trim kit (4 bars) TK6PT Pewter louver trim kit (4 bars) TK6BN Brushed nickel louver trim kit (4 bars)

CD4236 41 in. Caliber Top/Rear Direct Vent Circu- CD4842 47 in. Caliber Top-Rear Direct Vent Circulating Gas Appliance

Model #	Description	
FFCM42	Modernist-style black decorative faux front	
FFCM42PT	Modernist-style pewter decorative faux front	
FFCM42BN	Modernist-style brushed nickel decorative faux front	
FFCAC42	Arts & Crafts-style black decorative faux front	
FFCAC42PT	Arts & Crafts-style pewter decorative faux front	
FFCAC42BN	Arts & Crafts-style brushed nickel decorative faux front	
FFCJ42	Jamestown-style black decorative faux front	
FFCJ42PT	Jamestown-style pewter decorative faux front	
GFK4B	Transaxial fan kit	
GFK4MB	Multi-pack of 12 GFK4B transaxial fan kits	
GFK160B	160 CFM transaxial fan kit	
GFK160MB	Multi-pack of 12 GFK160B 160 CFM transaxial fan kits	
WTBC42D	42 in. weathered refractory	
WSK-MLT-HTL	Multi-function wall switch	
RC-BATT-HTL	Battery operated remote control	
RC-SMART-HTL	Remote control (requires 110v or prewiring)	
RCT-MLT-HTL	Multi-functional remote: ON/OFF, high/low flame, room temp, fan speed	
SMART-STAT-HTL	Multi-functional remote: ON/OFF, room temp, thermostat temp, timer	
SMART-BATT-HTL	Multi-functional remote: ON/OFF, thermostat temp, timer	
CKVP	LP gas conversion kit for standing pilot ignition system	
CKVN	Natural gas conversion kit for standing pilot ignition system	
DCKVP	LP gas conversion kit for Intellifire ignition system	
DCKVN	Natural gas conversion kit for Intellifire ignition system	
TK402B	Polished brass front trim kit (5 bars, 1 hood, 1 upper trim)	
TK402S	Stainless steel front trim kit (5 bars, 1 hood, 1 upper trim)	
TKN25B	Polished brass accent trim kit (2 pieces)	
TKN25S	Stainless steel accept trim kit (2 pieces)	
TKN25PT	Pewter accent trim kit (2 pieces)	
TKN25BN	Brushed nickel accent trim kit (2 pieces)	
TK7B	Polished brass louver trim kit (4 bars)	
TK7S	Stainless steel louver trim kit (4 bars)	
ТК7РТ	Pewter louver trim kit (4 bars)	
TK7BN	Brushed nickel louver trim kit (4 bars)	

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Gas Appliance (Fireplace) Limited Lifetime Warranty

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

Limited Lifetime Warranty

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

1 Year Limited Warranty

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

Conditions, Exclusions, & Limitations of Liability

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

How to Obtain Service

To obtain service under this warranty you must:

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

ADDITIONAL INFORMATION:

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

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Hearth & Home Technologies Inc. 1915 W. Saunders Street Mt. Pleasant, Iowa 52641 www.heatilator.com

Please contact your Heatilator dealer with any questions or concerns.

For the number of your nearest Heatilator dealer, place call 1-800-927-6841.

- NOTES -



CAUTION

DO NOT DISCARD THIS MANUAL

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

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