

#### WARNING: FIRE OR EXPLOSION HAZARD Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

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

In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.

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

DANGER

HOT GLASS WILL CAUSE BURNS.

DO NOT TOUCH GLASS UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.

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

This appliance may be installed as an OEM installation in manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280* in the United States, or the *Standard for Installation in Mobile Homes, CAN/CSA Z240 MH Series,* in Canada.

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

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

## A. Congratulations

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

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

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

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

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

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

## Listing Label Information/Location

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

Type of Gas	GAS-FIRED         The first name in fireplaces         Not for use with solid fuel.         (Ne doit pas entre utilise avec un combustible solide).	
Gas and Electric Information	Type of Gas (Sorte De Gaz): This appliance must be installed in accordance with local codes, if any; if not, follow ANSI Z223.1 in the USA or CAN/CGA B149 installation codes. (Installer l'appareil selon les codes ou reglements locaux ou, en l'absence de tels reglements, selon les codes d'installation CAN/CGA-B149.) ANSI Z21XX-XXXX · CSA 2.XX-MXX	
	Minimum Permissible Gas Supply for Purposes of Input Adjustment.         Approved Minimum (De Gaz) Acceptable       0.0 in w.c. (Po. Col. d'eau)         Maximum Pressure (Pression)       0.0 in w.c. (Po. Col. d'eau)         Maximum Manifold Pressure (Pression)       0.0 in w.c. (Po. Col. d'eau)         Minimum Manifold Pressure (Pression)       0.0 in w.c. (Po. Col. d'eau)         Minimum Manifold Pressure (Pression)       0.0 in w.c. (Po. Col. d'eau)         Total Electrical Requirements:       000Vac, 00Hz., less than 00 Amperes	Model Number
	IN CANADA       Model: (Modele):       XXXXXXXX         ALTITUDE:       0-0000 FT.       000-0000FT.       (Modele):       XXXXXXXX         MAX. INPUT BTUH:       00,000       00,000       (Modele):       XXXXXXXX         MIN. INPUT BTUH:       00,000       00,000       Serial (Serie):       XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Serial Number

## A Safety Alert Key:

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

## **Table of Contents**

	. Congratulations	2
	. Limited Lifetime Warranty	5
Listi	ng and Code Approvals	
A	. Appliance Certification	7
В	. Tempered Glass Specifications	7
С	. BTU Specifications	7
D	. High Altitude Installations	7
E	. Non-Combustible Materials Specification	7
F.	Combustible Materials Specification	7
G	. Electrical Codes	7
Н	. Requirements for the Commonwealth of	8
	Massachusetts	8

## **User Guide**

#### **2** Operating Instructions

Α.	Gas Fireplace Safety	9
В.	Your Fireplace	9
C.	Fan Kit (optional)	10
D.	Clear Space	10
Ε.	Decorative Doors and Fronts	10
F.	Fixed Glass Assembly	10
G.	Remote Controls, Wall Controls and	
	Wall Switches	10
Н.	Before Lighting Fireplace	10
I.	Lighting Instructions (IPI)	11
Κ.	After Appliance is Lit	12
L.	Flame Adjustment Control	12
М.	Frequently Asked Questions	12
3 Maint	enance and Service	
Α.	Maintenance Tasks-Homeowner	13
В.	Maintenance Tasks-Service Technician	14

## **Installer Guide**

#### **4 Getting Started**

Α.	Typical Appliance System	15
В.	Design and Installation Considerations	16
С.	Tools and Supplies Needed	16
D.	Inspect Appliance and Components	16
5 Frami	ng and Clearances	
Α.	Select Appliance Location	17
В.	Constructing the Appliance Chase	18
С.	Clearances	18
D.	Mantel and Wall Projections	19
6 Termi	nation Locations	
Α.	Vent Termination Minimum Clearances	20

7 V	ent l	nformation and Diagrams	
	Α.	Approved Pipe	22
	В.		22
		Use of Elbows	22
		Measuring Standards	22
	E.	Vent Diagrams	23
8 V		Clearances and Framing	
		Pipe Clearances to Combustibles	32
		Wall Penetration Framing	32
		Install the Ceiling Firestop	33
		Install Attic Insulation Shield	33
9 A		ance Preparation	
	Α.	- F	34
	B.		35
		Secure and Level the Appliance	36
10		Illing Vent Pipe	
		Assemble Vent Sections (DVP only)	37
		Assemble Vent Sections (SLP Pipe Only)	38
		Assemble Slip Sections	38
		Secure the Vent Sections Disassemble Vent Sections	39 39
		Install Decorative Ceiling Components (SLP only)	
		Install Metal Roof Flashing	40
		Assemble and Install Storm Collar	41
		Install Vertical Termination Cap	42
		Install Decorative Wall Components (SLP only)	42
		Heat Shield Requirements for Horizontal	
		Termination	42
	L.	Install Horizontal Termination Cap	43
11 \$	Shro	uds	
	Α.	HHT Shrouds	44
	В.	Field Constructed Shrouds	44
12	Gas	Information	
	Α.	Fuel Conversion	46
	В.	Gas Pressure	46
	C.	Gas Connection	46
	D.	High Altitude Installations	46
13	Elee	ctrical Information	
	Α.	Wiring Requirements	47
	В.	Intellifire Ignition System Wiring	47
	C.	Optional Accessories Requirements	47
	D.	Electrical Service and Repair	48
	E.	Junction Box Installation	49
	F.	Wall Switch Installation for Fan (Optional)	49

	14 Finis	shing	
	Α.	Mantel and Wall Projections	50
	В.	Facing Material	51
	15 App	bliance Setup	
	Α.	Remove the Packaging	52
	В.	Remove Screen Package Assembly	52
	С.	Remove the Shipping Materials	52
	D.	Removing Fixed Glass Assembly	52
	Ε.	Clean the Appliance	52
	F.	Accessories	52
	G.	Place the Rockwool	53
	H.	Place the Lava Rock	53
	I.	Place the Vermiculite	53
		Replacing Fixed Glass Assembly	53
	Κ.	Air Shutter Setting	53
	L.		54
	М.	Unpackage the Hood	54
	Ν.	Install Hood	54
	О.	Close the Screen Assembly	55
	16 Trou	bleshooting	
	Α.	Intellifire <sup>™</sup> Ignition System	56
	17 Refe	rence Materials	
	Α.	Appliance Dimension Diagram	58
	В.	Vent Components Diagrams	59
→	C.	Service Parts	68
	D.	Optional Components	74
	Ε.	Contact Information	75

 $\rightarrow$  = Contains updated information.

## Hearth & Home Technologies LIMITED LIFETIME WARRANTY

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

#### WARRANTY COVERAGE:

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

#### WARRANTY PERIOD:

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

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

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

See conditions, exclusions, and limitations on next page.

## → B. Limited Lifetime Warranty (continued)

#### WARRANTY CONDITIONS:

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

#### WARRANTY EXCLUSIONS:

This warranty does not cover the following:

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

#### This warranty is void if:

- The appliance has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The appliance is subjected to prolonged periods of dampness or condensation.
- There is any damage to the appliance or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

#### **LIMITATIONS OF LIABILITY:**

 The owner's exclusive remedy and HHT's sole obligation under this warranty, under any other warranty, express or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above. In no event will HHT be liable for any incidental or consequential damages caused by defects in the appliance. Some states do not allow exclusions or limitation of incidental or consequential damages, so these limitations may not apply to you. This warranty gives you specific rights; you may also have other rights, which vary from state to state. EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE.



## Listing and Code Approvals

#### A. Appliance Certification

#### MODELS: NDV3630I, NDV3933I, NDV4236I, NDV4842I,

NDV3630IL, NDV3933IL, NDV4236IL, NDV4842IL LABORATORY: Underwriters Laboratories, Inc. (UL)

TYPE: Vented Gas Fireplace Heaters

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

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

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 fac-

## tored as primary heat in residential heating calculations.

## **B. Tempered Glass Specifications**

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

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

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

## **C. BTU Specifications**

<b>Models</b> (U.S. or Canada)		Maximum Input BTU/h	Minimum Input BTU/h	Orifice Size (DMS)
NDV3630I (NG)	(0-2000 FT)	20,000	14,000	0.083
NDV3630IL (LP)	(0-2000 FT)	20,000	15,000	0.053
NDV3933I (NG)	(0-2000 FT)	22,000	15,000	0.089/#43
NDV3933IL (LP)	(0-2000 FT)	22,000	15,000	0.055/#54
NDV4236I (NG)	(0-2000 FT)	25,000	17,000	0.093/#42
NDV4236IL (LP)	(0-2000 FT)	25,000	17,000	0.058
NDV4842I (NG)	(0-2000 FT)	30,000	20,500	0.104/#37
NDV4842I (LP)	(0-2000 FT)	30,000	20,500	0.063/#52

## D. High Altitude Installations

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

When installing above 2000 feet elevation:

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

#### E. Non-Combustible Materials Specification

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

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

#### F. Combustible Materials Specification

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

#### G. Electrical Codes

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

A 110-120 VAC circuit for this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks. **Note:** The following requirements reference various Massachusetts and national codes not contained in this document.

# H. Requirements for the Commonwealth of Massachusetts

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

#### Installation of Carbon Monoxide Detectors

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

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

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

#### **Approved Carbon Monoxide Detectors**

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

#### Signage

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

#### Inspection

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

#### Exemptions

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

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

#### MANUFACTURER REQUIREMENTS

#### Gas Equipment Venting System Provided

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

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

#### Gas Equipment Venting System NOT Provided

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

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

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

See Gas Connection section for additional Commonwealth of Massachusetts requirements.

# **2** Operating Instructions

## A. Gas Fireplace Safety

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



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

High temperatures may ignite clothing or other flammable materials.

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

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

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

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

- A physical barrier is recommended if there are at risk individuals in the house.
- To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children and other at risk individuals out of the room and away from hot surfaces.
- Install a switch lock or a wall/remote control with child protection lockout feature.
- Keep remote controls out of reach of children.

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

Contact your dealer for more information, or visit: <u>www.</u> <u>hpba.org/safety-information</u>.

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

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

## **B. Your Fireplace**

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

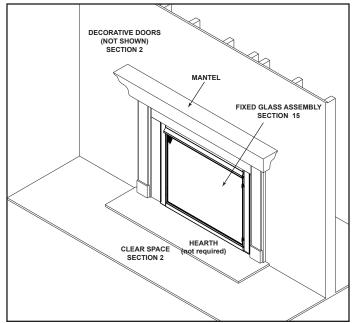


Figure 2.1 General Operating Parts

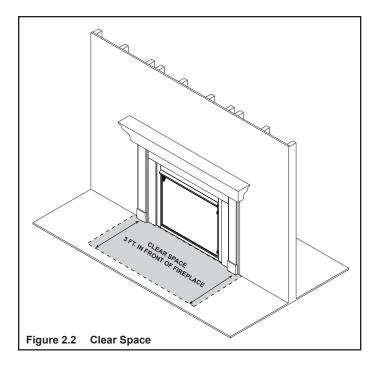
## C. Fan Kit (optional)

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

## D. Clear Space

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

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



## E. Decorative Doors and Fronts

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

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.

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

## F. Fixed Glass Assembly

See Section 15.

## G. Remote Controls, Wall Controls and Wall Switches

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

For safety:

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

See your dealer if you have questions.

## H. Before Lighting Fireplace

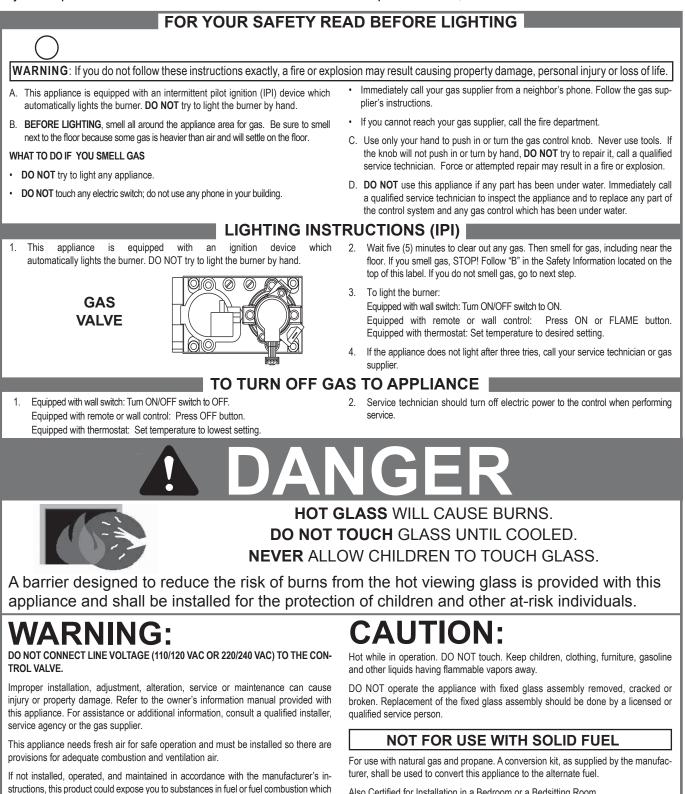
Before operating this fireplace for the first time, **have a qualified technician**:

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

**WARNING! Risk of Fire/Asphyxiation! DO NOT** operate fireplace with fixed glass assembly removed.

## I. Lighting Instructions (IPI)

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



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

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

For additional information on operating your Hearth & Home Technologies fireplace, please refer to www.fireplaces.com.

593-913i

are known to the State of California to cause cancer, birth defects, or other reproductive

Keep burner and control compartment clean. See installation and operating instruc-

harm.

tions accompanying appliance.

## K. After Appliance is Lit

Initial Break-in Procedure

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

This cures the materials used to manufacture the fire-place.

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

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

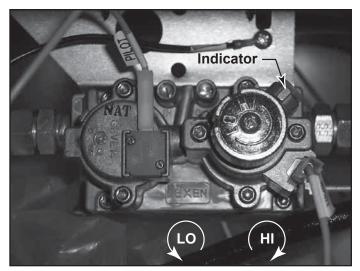


Figure 2.3 DEXEN Valve - IntelliFire Ignition System

## L. Flame Adjustment Control

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

- Open control access panel.
- Compare your valve to Figures 2.3.
- Adjust the flame by turning knob as indicated in the photo matching your valve.

## **M. Frequently Asked Questions**

ISSUE	SOLUTIONS
Condensation on the glass	This is a result of gas combustion and temperature variations. As the appliance warms, this condensation will disappear.
Blue flames	This is a result of normal operation and the flames will begin to yellow as the appliance is allowed to burn for 20 to 40 minutes.
Odor from appliance	When first operated, this appliance may release an odor for the first several hours. This is caused by the curing of materials from manufacturing. Odor may also be released from finishing materials and adhesives used near the appliance. These circumstances may require additional curing related to the installation environment.
Film on the glass	This is a normal result of the curing process of the paint and logs. Glass should be cleaned within 3 to 4 hours of initial burning. A non-abrasive cleaner such as gas appliance glass cleaner may be necessary. See your dealer.
Metallic noise	Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of the appliance.
Is it normal to see the pilot flame burn continually?	In an IntelliFire ignition system (IPI), the pilot flame should turn off when appliance is turned off. Some optional control systems available with IPI models may allow pilot flame to remain lit.



## **Maintenance and Service**

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

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

#### A. Maintenance Tasks-Homeowner

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

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

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

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

#### **Glass Cleaning**

Frequency: Seasonally

By: Homeowner

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

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

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

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

- Remove door or decorative front from appliance and set aside on work surface.
- See Section 15 for instructions to remove fixed glass assembly.
- Clean glass with a non-abrasive commercially available cleaner.
  - Light deposits: Use a soft cloth with soap and water
  - Heavy deposits: Use commercial fireplace glass cleaner (consult with your dealer)
- Carefully set fixed glass assembly in place on appliance. Hold glass in place with one hand and secure glass latches with the other hand.
- · Reinstall door or decorative front.

#### Doors, Surrounds, Fronts

Frequency: Annually

By: Homeowner

Tools needed: Protective gloves, stable work surface

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

#### **Remote Control**

Frequency: Seasonally

By: Homeowner

**Tools needed:** Replacement batteries and remote control instructions.

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

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

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

## Venting

Frequency: Seasonally

#### By: Homeowner

Tools needed: Protective gloves and safety glasses.

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

#### B. Maintenance Tasks-Service Technician

The following tasks must be performed by a qualified technician.

## **Gasket Seal and Glass Assembly Inspection**

Frequency: Annually

By: Service Technician

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

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

#### Logs

#### Frequency: Annually

By: Service Technician

Tools needed: Protective gloves.

- Inspect for damaged or missing logs. Replace as necessary.
- Verify correct log placement and no flame impingement causing sooting. Correct as necessary.

#### Firebox

Frequency: Annually

#### By: Service Technician

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

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

## **Control Compartment and Firebox Top**

Frequency: Annually

By: Service Technician

**Tools needed:** Protective gloves, vacuum cleaner, dust cloths

- Vacuum and wipe out dust, cobwebs, debris or pet hair. Use caution when cleaning these areas. Screw tips that have penetrated the sheet metal are sharp and should be avoided.
- Remove all foreign objects.
- Verify unobstructed air circulation.

## **Burner Ignition and Operation**

Frequency: Annually

By: Service Technician

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

- Verify burner is properly secured and aligned with pilot or igniter.
- Clean off burner top, inspect for plugged ports, corrosion or deterioration. Replace burner if necessary.
- Replace ember materials with new dime-size pieces.
   DO NOT block ports or obstruct lighting paths. Refer to Section 15 for proper ember placement.
- Verify batteries have been removed from battery back-up IPI systems to prevent premature battery failure or leaking.
- Check for smooth lighting and ignition carryover to all ports. Verify that there is no ignition delay.
- Inspect for lifting or other flame problems.
- Verify air shutter setting is correct. See Section 15 for required air shutter setting. Verify air shutter is clear of dust and debris.
- Inspect orifice for soot, dirt and corrosion. Verify orifice size is correct. See Service Parts List for proper orifice sizing.
- Verify manifold and inlet pressures. Adjust regulator as required.
- Inspect pilot flame pattern and strength. See Figure 3.1 for proper pilot flame pattern. Clean or replace orifice spud as necessary.
- Inspect IPI flame sensing rod for soot, corrosion and deterioration. Polish with fine steel wool or replace as required.
- Verify IPI millivolt output.Replace as necessary.

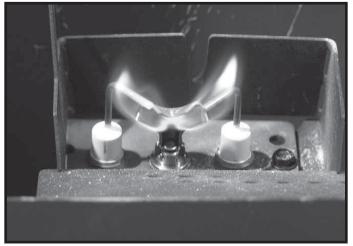
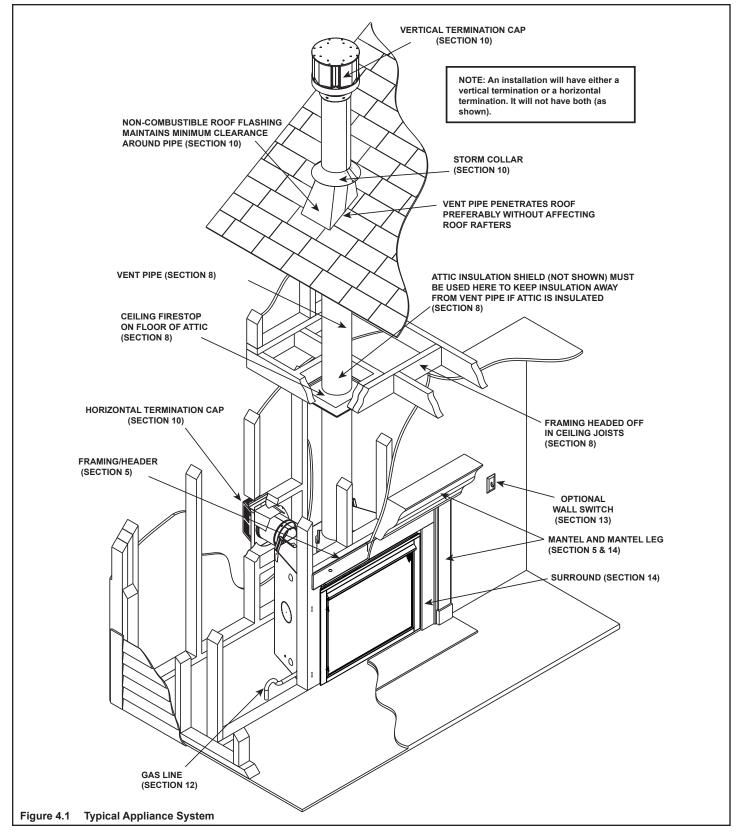


Figure 3.1 IPI Flame Patterns

## A. Typical Appliance System

**Getting Started** 

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



### B. Design and Installation Considerations

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

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

Before installing, determine the following:

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

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

mvhht FACTORY

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

## C. Tools and Supplies Needed

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

Tape measure	Framing material
Pliers	Noncorrosive leak check solution
Hammer	Phillips screwdriver
Gloves	Framing square
Voltmeter	Electric drill and bits (1/4 in.)
Plumb line	Safety glasses
Level	Reciprocating saw
Manometer	Flat blade screwdriver
4/0 $0/4$ is a large state	

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

Caulking material (300°F minimum continuous exposure rating)

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

### **D. Inspect Appliance and Components**

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

WARNING! Risk of Fire or Explosion! Damaged parts could impair safe operation. DO NOT install damaged, incomplete or substitute components. Keep appliance dry.

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

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

Any such action may cause a fire hazard.

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

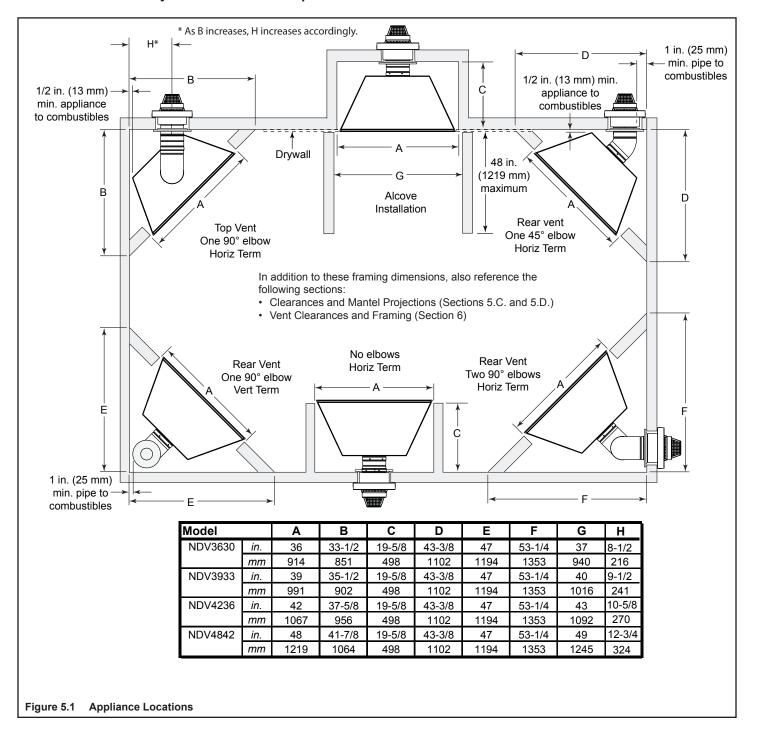
Framing and Clearances

#### A. Select Appliance Location

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

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

**NOTICE:** Illustrations reflect typical installations and are FOR DESIGN PURPOSES ONLY. Illustrations/diagrams are not drawn to scale. Actual installation may vary due to individual design preference.



### **B.** Constructing the Appliance Chase

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

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

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

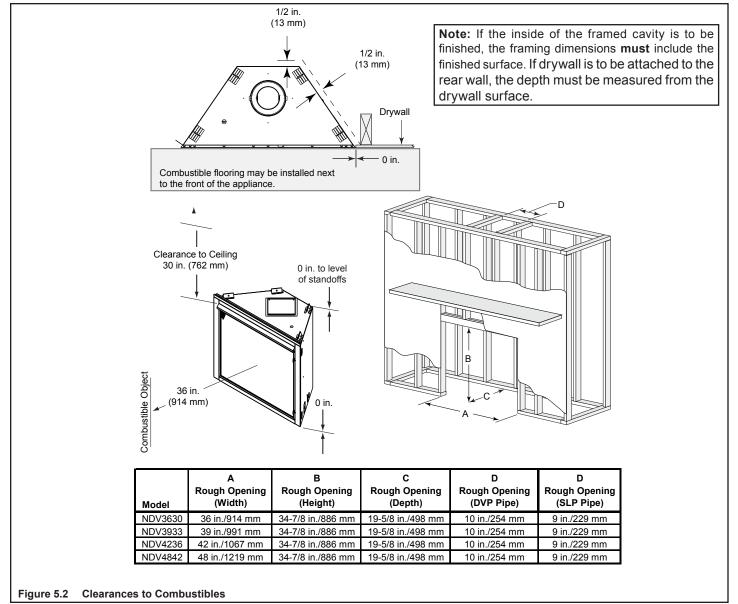
Walls, ceiling, base plate and cantilever floor of the chase should be insulated. Vapor and air infiltration barriers should be installed in the chase as per regional codes for the rest of the home. Additionally, in regions where cold air infiltration may be an issue, the inside surfaces may be sheetrocked and taped for maximum air tightness. To further prevent drafts, the wall shield and ceiling firestops should be caulked with caulk with a minimum of 300°F continuous exposure rating to seal gaps. Gas line holes and other openings should be caulked with caulk with a minimum of 300°F continuous exposure rating or stuffed with unfaced insulation. If the appliance is being installed on a cement slab, a layer of plywood may be placed underneath to prevent conducting cold up into the room.

## C. Clearances

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

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

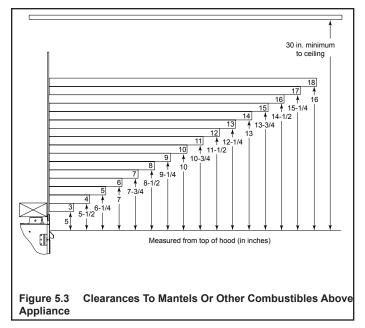
- Insulation and other materials must be secured to prevent accidental contact.
- Failure to maintain airspace may cause overheating and a fire.



## **D. Mantel and Wall Projections**

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

#### Mantels



#### Mantel Legs or Wall Projections

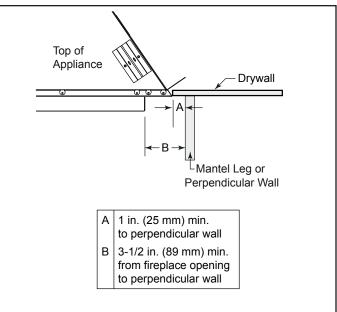
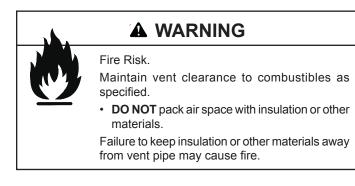
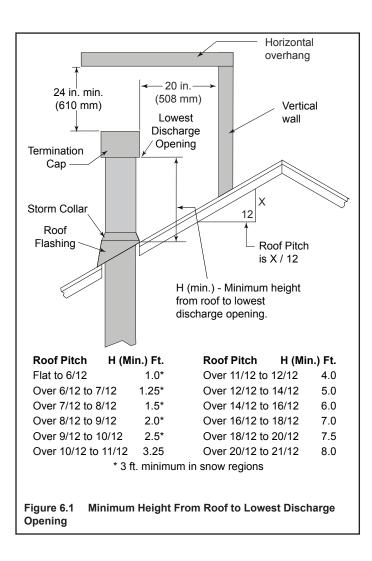
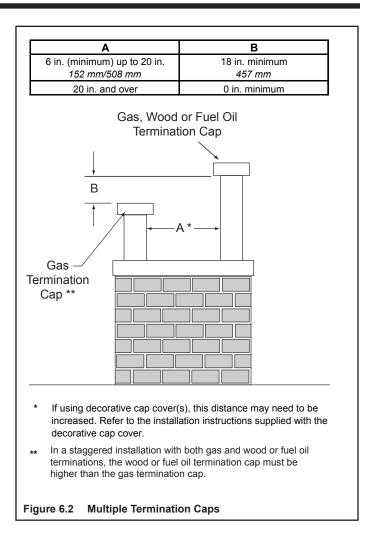


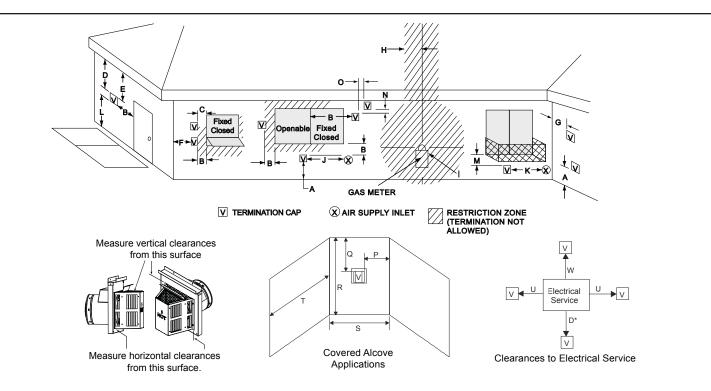
Figure 5.4 Mantel Leg or Wall Projections (Acceptable on both sides of opening)

## A. Vent Termination Minimum Clearances









#### **Dimension Descriptions**

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

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

M Clearance under veranda, porch, deck or balcony - 12 in. (30 cm) minimum. \* Recommended 30 in. (76 cm) for vinyl or plastic.

Only permitted if veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor.  $^{\ast}$ 

N 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

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

#### R 8 ft.

- U 6" min. Clearance from sides of electrical service.
- W 12" min. Clearance above electrical service.
- \* As specified in CGA B149 Installation Codes

Note: Local codes or regulations may require different clearances.

\*\* Clearance required to vinyl soffit material – 30 in. (76 cm) minimum. Note: Location of the vent termination must not interfere with access to the electrical service.

#### WARNING!

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

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

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

#### Figure 6.3 Minimum Clearances for Terminations

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

# Vent Information and Diagrams

## A. Approved Pipe

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

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

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

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

## B. Vent Table Key

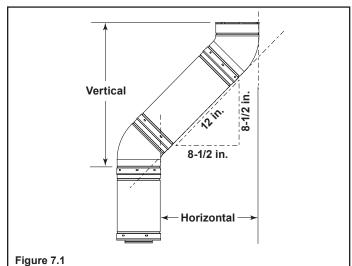
The abbreviations listed in this vent table key are used in the vent diagrams.

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

## C. Use of Elbows

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

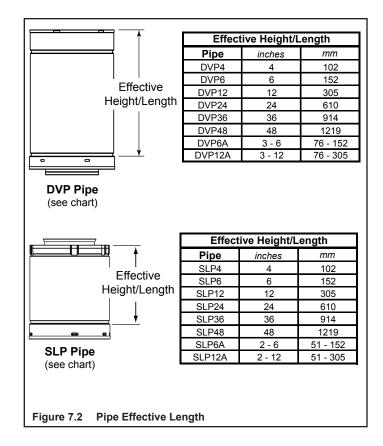
Two  $45^{\circ}$  elbows may be used in place of one  $90^{\circ}$  elbow. On  $45^{\circ}$  runs, one foot of diagonal is equal to 8-1/2 (216 mm) inches horizontal run and 8-1/2 (216 mm) inches vertical run. A length of straight pipe is allowed between two  $45^{\circ}$  elbows (see Figure 7.1).



## D. Measuring Standards

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

- Pipe measurements are shown using the effective length of pipe (see Figure 7.2).
- 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 6.3).
- Vertical terminations are measured to bottom of termination cap.
- Horizontal pipe installed level with no rise.



## E. Vent Diagrams

To replace the first starter elbow with two  $45^{\circ}$  elbows, refer to Figure 7.4. All other 90° elbows can be replaced with two  $45^{\circ}$  elbows.

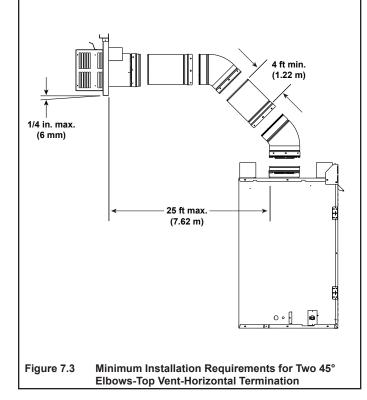
General Rules:

- 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.
- Elbows may be placed back to back anywhere in the system as long as the first 90° elbow is a starter elbow except as shown in Figure 7.3.
- When penetrating a combustible wall, a wall shield firestop must be installed.
- When penetrating a combustible ceiling, a ceiling firestop must be installed.
- Horizontal runs of vent do not require vertical rise; horizontal runs may be level.
- Horizontal termination cap should have a 1/4 inch downward slant to allow any moisture in cap to be released. See Figure 7.3.

## 1. Top Vent - Horizontal Termination

#### Two 45° Elbows

Installation requirements to replace the first  $90^{\circ}$  elbow with two  $45^{\circ}$  elbows:

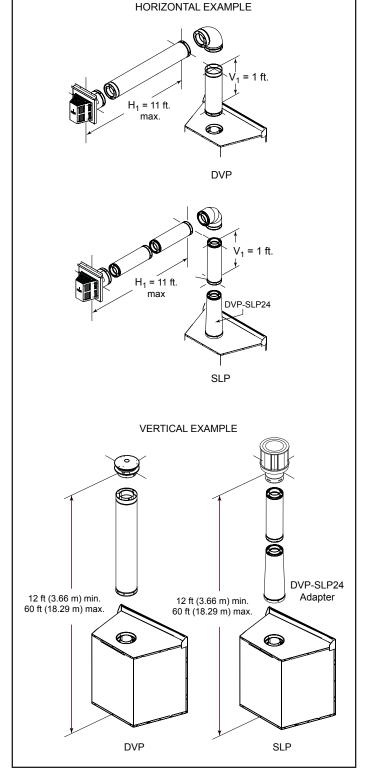


Note: The NDV series appliances can adapt to SLP series vent pipe when venting off the <u>top</u> of the appliance. You must use a DVP-SLP24 adapter which can only be attached to the appliance starting collar.

When looking at <u>horizontal termination</u> diagrams, the adapter is not counted as part of the minimum vertical  $(V_1 \text{ min.})$  requirements.

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

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



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

One Elbow	
A.	
	A second

V1 Min	V1 Max	H₁ Max.	
0*	-	24 in./635 mm	
4 in./102 mm	-	4 ft/1.22 m	
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 (DVP)	25 ft/7.62 m	
-	23 ft/7.62 m (SLP)	25 ft/7.62 m	

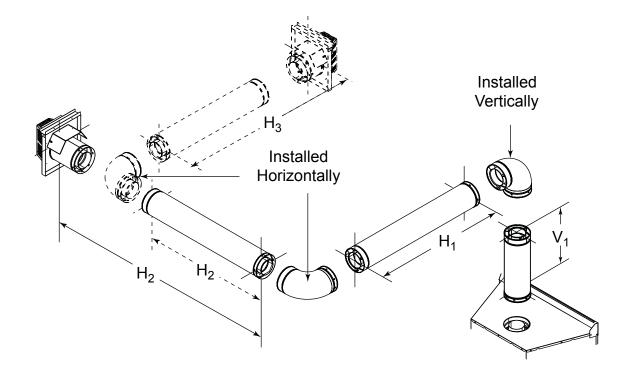
\* You may install the elbow directly on top of the appliance (DVP only).

#### Figure 7.4

#### **Two Elbows**

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.	$H_1 + H_2 max.$	$H_1 + H_2 + H_3 max.$
6 in./152 mm	-	6 ft/1.83 m	-
12 in./305 mm	-	11 ft/3.35 m	11 ft/3.35m
18 in./457 mm	-	18 ft/5.49 m	18 ft/5.49m
24 in./610 mm	-	25 ft/7.62m	25 ft/7.62m
-	25 ft/7.62 m (DVP)	25 ft/7.62m	25 ft/7.62m
-	23 ft/7.01 m (SLP)	25 ft/7.62m	25 ft/7.62m



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

hree Elbows	V <sub>1</sub> min.	$V_1 + V_2 max.$	$H_1 + H_2 max.$	
	12 in./305 mm	24 ft/7.32 m (DVP)	19 ft/5.79 m	
	12 in./305 mm	22 ft/6.71 m (SLP)	19 ft/5.79 m	

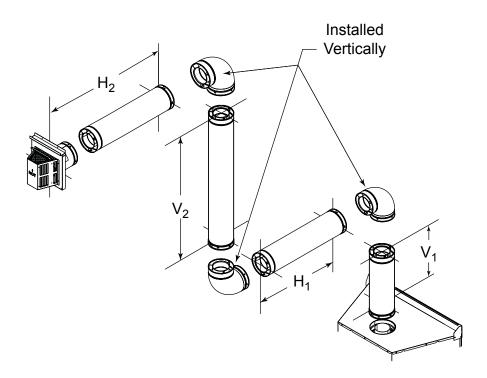
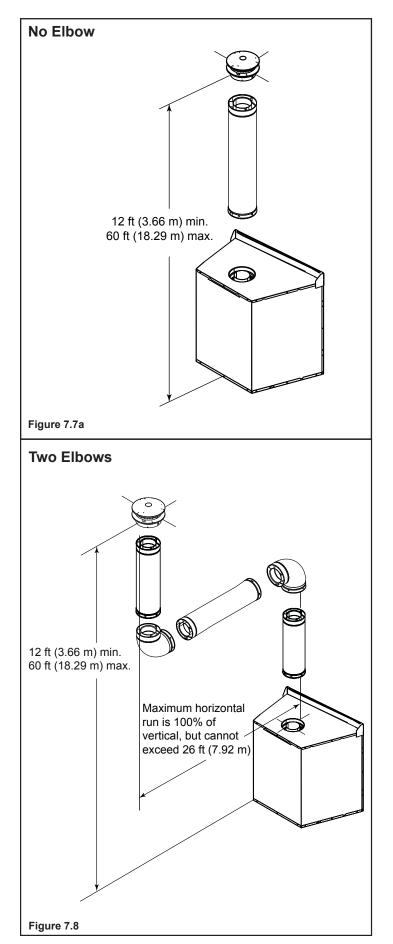


Figure 7.6



#### Install Top Vent Flue Visor - No Elbow Configurations

- Remove screws holding flue visor to firebox top. See Figure 7.7b.
- Remove the flue visor.
- Using the screws removed and the same holes, install the top vent flue baffle and flue visor.
  - The flue visor will be turned to install below the level of the firebox top for 12-30 ft vertical runs of vent. See Figure 7.7c.
  - The flue visor will be turned to install inside the flue for vertical vent runs of 31-60 ft. See Figure 7.7d.



Figure 7.7b Remove Flue Visor



Figure 7.7c 12 to 30 ft Vertical Run



Figure 7.7d 31 ft to 60 ft Vertical Run

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

	Note: Subtract 3 ft (914 mm) from the total horizontal
Three Elbows	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.

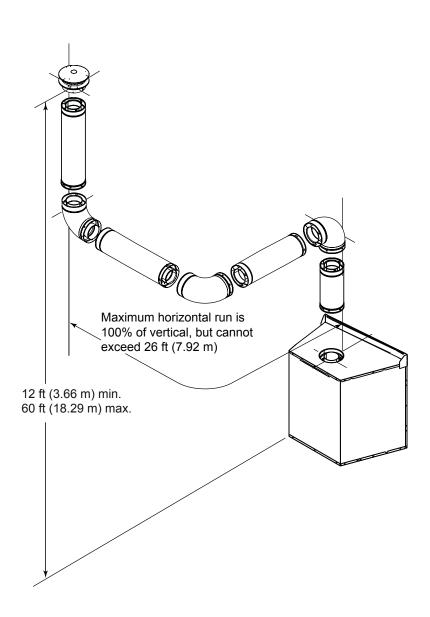
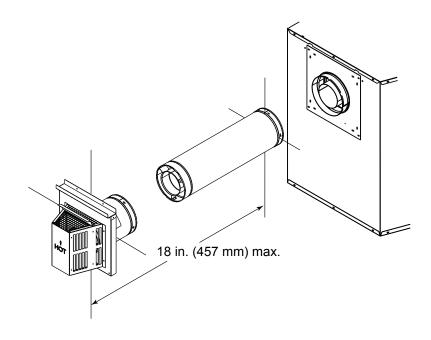


Figure 7.9

## 3. Rear Vent - Horizontal Termination (DVP only)







#### One 45° Elbow

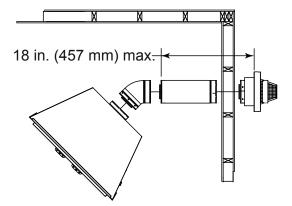


Figure 7.11

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

Two Elbows	Model		H1 Max	Total Vert V Min.	Total Horiz H1 + H2
	NDV	ft	0-2	1	3
	Series	m	061	0.31	0.91
		ft	4	2	6
		m	1.22	0.61	1.83
		ft	6	3	9
		m	1.83	0.91	2.74
		ft	8	4	12
		m	2.44	1.22	3.66
		ft	8	5	15
		m	2.44	1.52	4.57
		ft	8	6	18
		m	2.44	1.83	5.49
$H_2$		H			

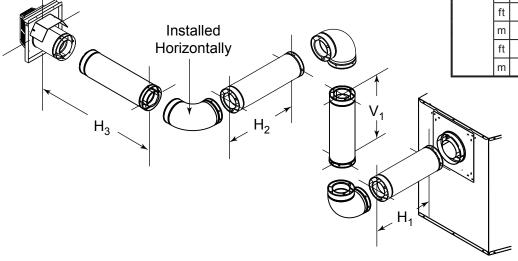
 $H_1$ 

Figure 7.12

#### **Three Elbows**

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.

Model		H1 Max	Total Vert V Min.	Total Horiz H1 + H2 + H3
NDV	ft	0-2	1	3
Series	m	061	0.31	0.91
	ft	4	2	6
	m	1.22	0.61	1.83
	ft	6	3	9
	m	1.83	0.91	2.74
	ft	8	4	12
	m	2.44	1.22	3.66
	ft	8	5	15
	m	2.44	1.52	4.57
	ft	8	6	18
	m	2.44	1.83	5.49



## 4. Rear Vent - Vertical Termination (DVP only)



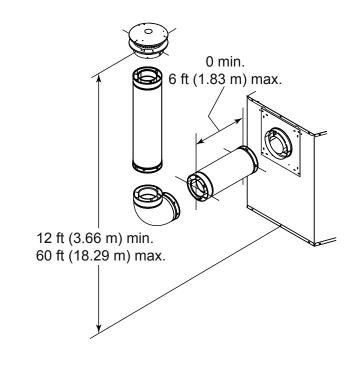
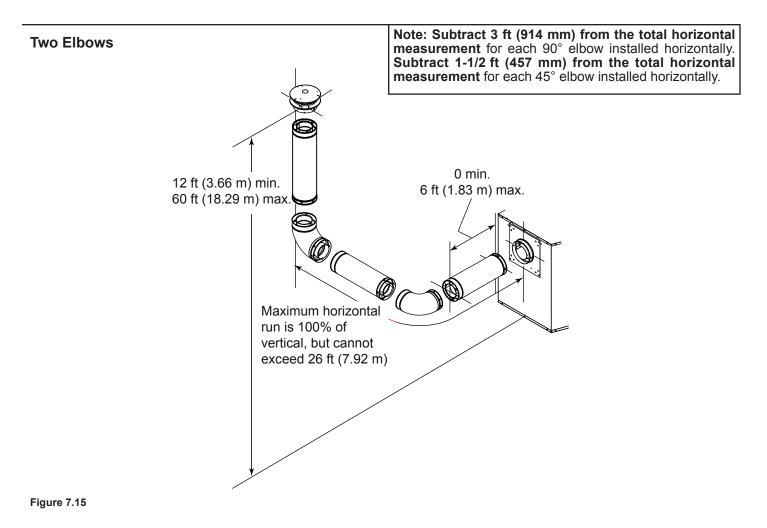


Figure 7.14



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

#### **Three Elbows**

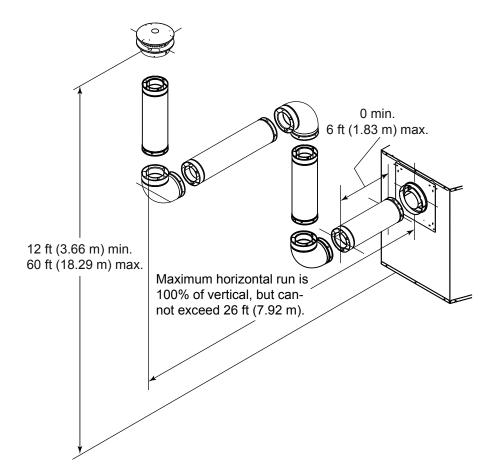


Figure 7.16

#### A. Pipe Clearances to Combustibles

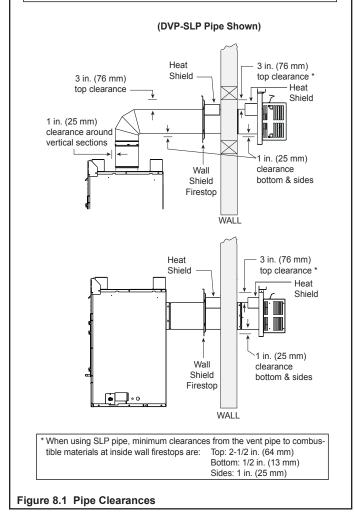
**WARNING!** Risk of Fire! Maintain air space clearance to vent. **DO NOT** pack insulation or other combustibles:

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

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

Note: Heat shields MUST overlap by a minimum of 1-1/2 in. (38 mm). • DVP heat shield - designed to be used on a wall 4 in. to 7-1/4 in. (102 mm to 184 mm) thick.

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



## **B. Wall Penetration Framing**

#### **Combustible Wall Penetration**

Frame a hole in a combustible wall for an interior wall shield firestop, (Figure 8.2) whenever a wall is penetrated.

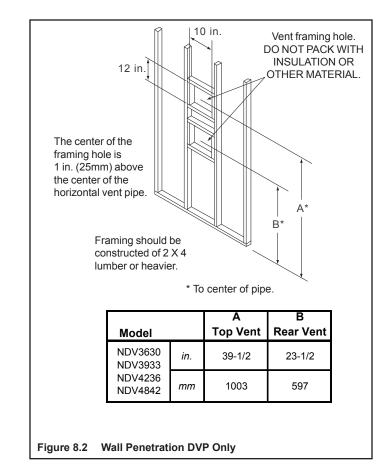
The opening must be framed on all four sides using the same size framing materials as those used in the wall construction. The wall shield firestop maintains minimum clearances and prevents cold air infiltration.

#### Non-Combustible Wall Penetration

If the hole being penetrated is surrounded by non-combustible materials such as concrete, a hole with diameter 1 in. greater than the pipe is acceptable.

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

If your local inspector requires the wall shield firestop on both sides, then both wall shield firestops must have a heat shield attached to them.



## C. Install the Ceiling Firestop

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

- DVP Pipe only Frame an opening 10 in. by 10 in. (254 mm by 254 mm) whenever the vent penetrates a ceiling/floor (see Figure 8.3).
- SLP Pipe only Frame an opening 9 in. by 9 in. (229 mm x 229 mm) whenever the vent penetrates a ceiling/floor (see Figure 8.3).
- Frame the area with the same sized lumber as used in ceiling/floor joist.
- The ceiling firestop may be installed above or below the ceiling joists when installed with a attic insulation shield. It must be under joists between floors that are not insulated. Refer to Figure 8.4.

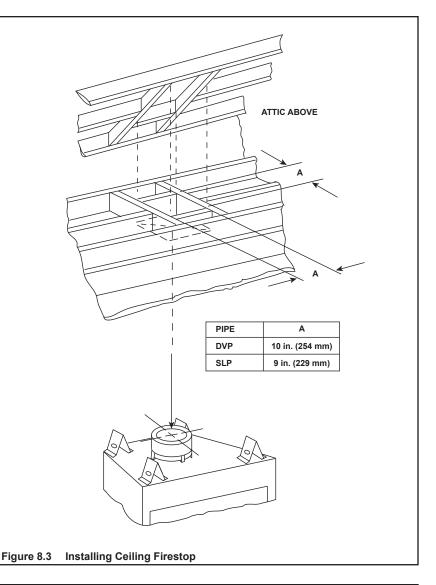
• Secure with three fasteners on each side. WARNING! Risk of Fire. DO NOT pack insulation around the vent. Insulation must be kept back from the pipe to prevent overheating.

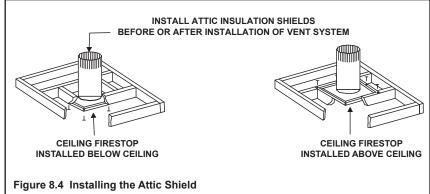
## **D. Install Attic Insulation Shield**

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

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

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







## A. Top Vent

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

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

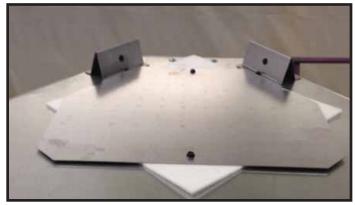


Figure 9.1

• Remove the cover plate by removing the two screws holding it to the top of the appliance. Remove and discard the cover plate.



Figure 9.2

Remove the center insulation plug.

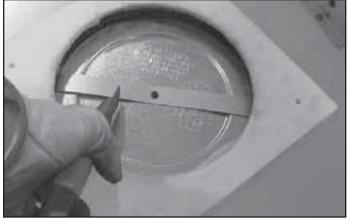


Figure 9.3

• Cut the metal retaining band and fold the sides out.

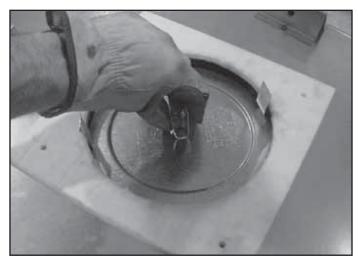


Figure 9.4

Fold the center parts of the retaining band up and use to remove the vent cap.

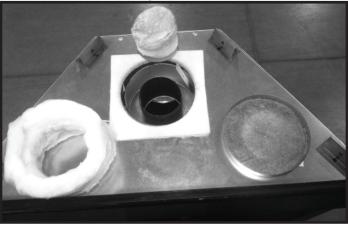


Figure 9.5

 Discard the vent cap, remove and discard the insulation basket from the inner vent pipe. Note: Once the vent cap has been removed it cannot be reattached. Remove insulation from outer vent pipe.





Attach the first vent section. It will snap into place.

#### Proceed to Section 9.C.

#### **B. Rear Vent**

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



Figure 9.7

• Fold the tabs toward the center of the fire plug (90°) and remove the insulation gasket.



Figure 9.8

• Cut the metal retaining band and fold the sides out.



Figure 9.9

 Fold the center parts of the retaining band out and use to remove the vent cap.

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

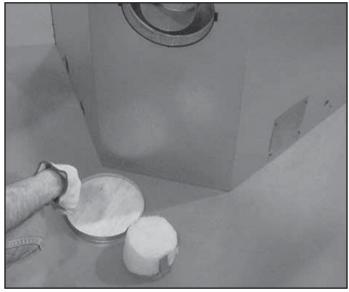


Figure 9.10

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

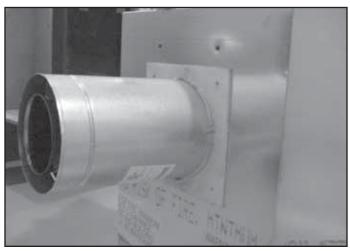


Figure 9.11

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

#### C. Secure and Level the Appliance

WARNING! Risk of Fire! Prevent contact with:

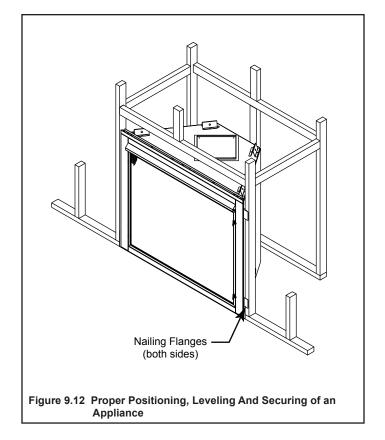
- Sagging or loose insulation
- Insulation backing or plastic
- Framing and other combustible materials Block openings into the chase to prevent entry of blownin insulation. Make sure insulation and other materials are secured.

**DO NOT** notch the framing around the appliance standoffs.

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

The diagram shows how to properly position, level, and secure the appliance (see Figure 9.12). Nailing tabs are provided to secure the appliance to the framing members.

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



# **10** Installing Vent Pipe

## A. Assemble Vent Sections (DVP only)

## Attach Vent to the Firebox Assembly

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

Attach the first pipe section to the starting collar:

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

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

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

- Apply a bead of silicone sealant (300° F minimum continuous exposure rating) inside the female outer pipe joint prior to joining sections. See Figure 10.1
- Only outer pipes must be sealed. All unit collar, pipe, slip section, elbow and cap outer flues shall be sealed in this manner, unless otherwise stated.

#### WARNING! Risk of Fire/Explosion! DO NOT break

silicone seals on slip sections. Use care when removing termination cap from slip pipe. If slip section seals are broken during removal of the termination cap, vent will leak and a fire or explosion could occur.

## Assemble Pipe Sections

- See Figure 10.2.
- Start the inner pipe on the lanced end of section A into the flared end of section B.
- Start the outer pipe of section A over the outer pipe of section B.
- Once both vents sections are started, push firmly until all lanced tabs lock into place.

• Lightly tug on the pipe to confirm the tabs have locked. It is acceptable to use screws no longer than 1/2 in. (13 mm) to hold outer pipe sections together. If predrilling holes, **DO NOT** penetrate inner pipe.

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



Figure 10.1 High Temperature Silicone Sealant



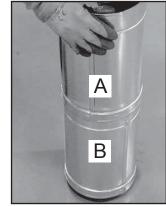


Figure 10.2

Figure 10.3

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



CORRECT

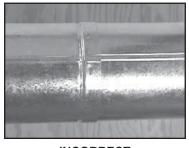


Figure 10.4 Seams

INCORRECT

#### B. Assemble Vent Sections (SLP Pipe Only)

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

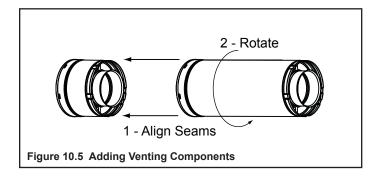
- Attach an DVP-SLP24 adapter to the starting collar of the appliance.
- Lock the vent components into place by sliding the pipe section onto the collar.
- Align the seam of the pipe and seam of collar to allow engagement. Rotate the vent component to lock into place. Use this procedure for all vent components. See Figure 10.5.
- Slide the gasket over the first vent section and place it flush to the appliance. This will prevent cold air infiltration. Caulk with a minimum of 300°F continuous exposure rating may be used to hold the part in place.
- Continue adding vent components, locking each succeeding component into place.
- Ensure that each succeeding vent component is securely fitted and locked into the preceding component.

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

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

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

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



## C. Assemble Slip Sections

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

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

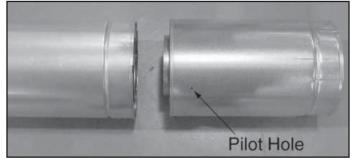


Figure 10.6 Slip Section Pilot Holes

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



Figure 10.7 Screws into Slip Section

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

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

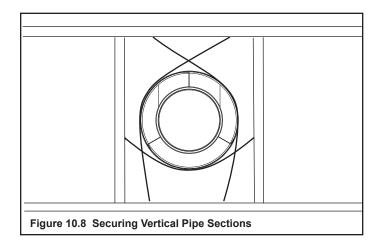
**NOTICE:** When installing a vent system with an HRC termination cap, all pipe system joints shall be sealed using a high temperature silicone sealant (300° F minimum continuous exposure rating).

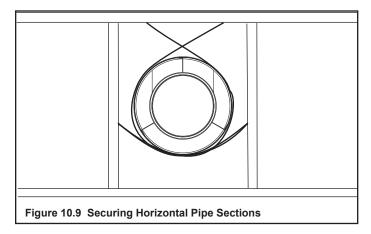
- Apply a bead of silicone sealant inside the female outer pipe joint prior to joining sections.
- Only outer pipes are sealed, sealing the inner flue is not required.
- All unit collar, pipe, slip section, elbow and cap outer flues shall be sealed.

#### **D. Secure the Vent Sections**

- Vertical runs originating off the top of the appliance, with no offsets, must be supported every 8 ft. (2.44 m) after the maximum allowed 25 ft. (7.62 m) of unsupported rise.
- Vertical runs originating off the rear of the appliance, or after any elbow, must be supported every 8 ft.(2.44 m).
- Horizontal runs must be supported every 5 ft. (1.52 m).
- Wall shield firestops may be used to provide horizontal support.
- Vent support or plumber's strap (spaced 120° apart) may be used for support. See Figures 10.8 and 10.9.
- SLP ceiling firestops have tabs that may be used to provide vertical support.

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





#### E. Disassemble Vent Sections

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

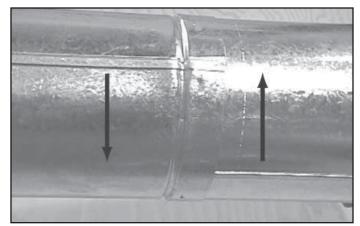


Figure 10.10 Rotate Seams for Disassembly

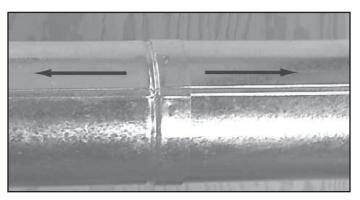


Figure 10.11 Align and Disassemble Vent Sections

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

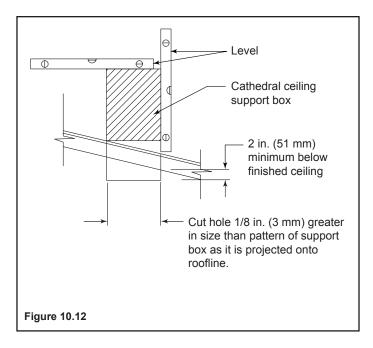
A decorative ceiling thimble can be installed on a flat ceiling through which the vent passes. The ceiling thimble is used to cover the firestop, which is installed according to section 8.C.

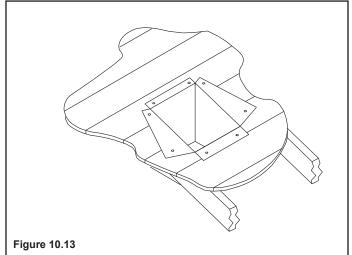
- Seal the gap between the vent pipe and firestop using high temperature silicone (300° F minimum continuous exposure rating) to prevent cold air infiltration.
- Install the decorative ceiling thimble by sliding it up to the ceiling and attaching it using the provided screws.

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

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

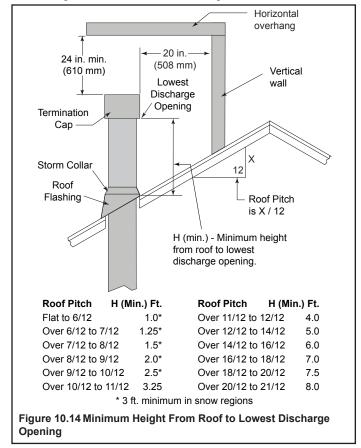
**WARNING!** Risk of Fire! Clean out ALL materials from inside the support box and complete the vertical vent run and termination.





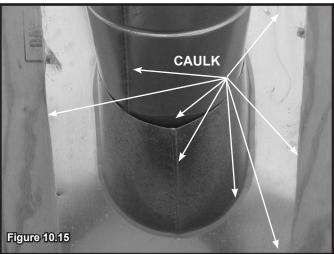
#### G. Install Metal Roof Flashing

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



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

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



### H. Assemble and Install Storm Collar

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

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



Figure 10.16 Insert Bolt into Brackets

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

#### I. Install Vertical Termination Cap

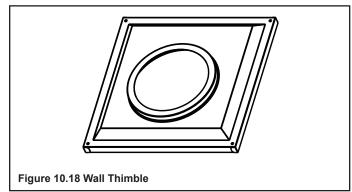
- Attach the vertical termination cap by sliding the inner collar of the cap into the inner flue of the pipe section while placing the outer collar of the cap over the outer flue of the pipe section.
- Secure the cap by driving three self-tapping screws (supplied) through the pilot holes in the outer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



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

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

- Slide the decorative wall thimble over the last section of horizontal pipe before passing through the wall to the outside.
- Once the pipe section and the termination cap have been connected, slide the wall thimble up to the interior wall surface and attach with screws provided. See Figure 10.18.



## K. Heat Shield Requirements for Horizontal Termination

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

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

There are two sections of the heat shield. One section is factory-attached to the wall shield firestop. The other section is factory-attached to the cap. See Figure 10.19.

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

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

Important Notice: Heat shields may not be field constructed.

42

#### L. Install Horizontal Termination Cap

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

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

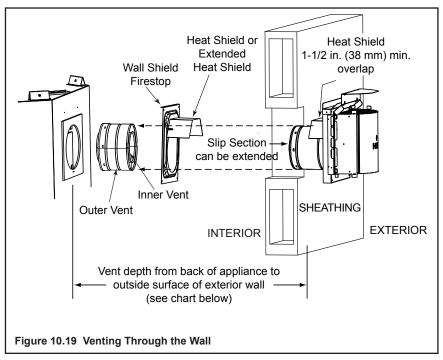
Failure to maintain overlap may cause overheating and fire.

- Vent termination must not be recessed in the wall. Siding may be brought to the edge of the cap base.
- Flash and seal as appropriate for siding material at outside edges of cap.
- When installing a horizontal termination cap, follow the cap location guidelines as prescribed by current ANSI Z223.1 and CAN/CGA-B149 installation codes and refer to Section 6 of this manual.

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

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

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



Cap Specification Chart (depth without using additional pipe sections)
--

			-			
	DVP-TRAPK1 Top Vent <u>Depth</u>	DVP-TRAP1 Rear Vent <u>Depth</u>	DVP-TRAPK2 Top Vent <u>Depth</u>	DVP-TRAP2 Rear Vent <u>Depth</u>	SLP-TRAP1 Top Vent <u>Depth</u>	SLP-TRAP2 Top Vent <u>Depth</u>
	4 1/2 to 6 3/8 in.	3 to 4 7/8 in.	6 7/8 to 10 7/8 in.	5 3/8 to 9 3/8 in.	2 to 3 7/8 in.	4 3/8 to 8 3/8 in.
NDV Series					_	
	DVP-HPC1 Top Vent <u>Depth</u>	DVP-HPC1 Rear Vent <u>Depth</u>	DVP-HPC2 Top Vent <u>Depth</u>	DVP-HPC2 Rear Vent <u>Depth</u>		
	4 1/2 to 6 5/8 in.	3 to 5 1/8 in.	6 5/8 to 10 3/4 in.	5 1/8 to 9 1/4 in.		

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

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

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

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

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

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



#### A. HHT Shrouds

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

#### **B. Field Constructed Shrouds**

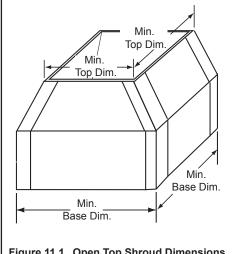
WARNING! Risk of Fire! Shrouds must be constructed as specified. Improper construction may overheat chase top.

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

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

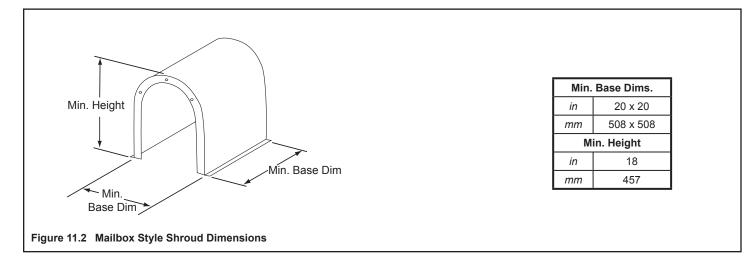
- The following field constructed shroud designs have been tested for Hearth Technologies fireplace systems and termination caps.
- The shrouds must be constructed from a minimum .018 in. (26 ga) thick aluminized steel.
- The wire mesh is optional but recommended and must be .018 in. thick minimum, 1/2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

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

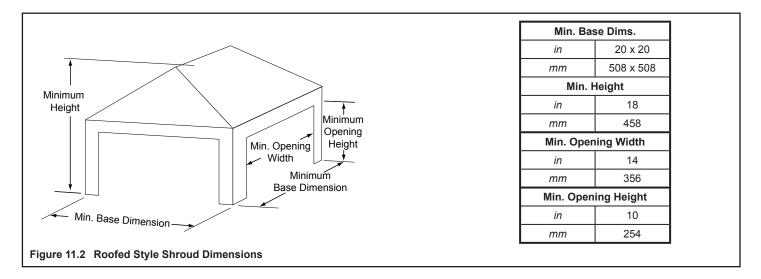


Min. Base Dims.						
<i>in</i> 19 x 19						
mm	483 x 483					
Min. Top Dims.						
in	16 x 16					
mm	406 x 406					

#### Figure 11.1 Open Top Shroud Dimensions



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





#### A. Fuel Conversion

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

#### **B. Gas Pressure**

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

Gas Pressure	Natural Gas	Propane		
Minimum inlet pressure	5.0 in. w.c.	11.0 in. w.c.		
Maximum inlet pressure	10.0 in. w.c.	13.0 in. w.c.		
Manifold pressure	3.5 in. w.c.	10.0 in. w.c.		

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

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



## **WARNING**

Fire Risk. Explosion Hazard.

High pressure will damage valve.

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

**Note:** Have the gas supply line installed in accordance with local codes, if any. If not, follow ANSI 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 inch (13 mm) T-handle manual shut-off valve and flexible gas connector are connected to the 1/2 inch (13 mm) control valve inlet.

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

### **C. Gas Connection**

- Refer to Reference Section 17 for location of gas line access in appliance.
- Gas line may be run through knockout(s) provided.
- The gap between supply piping and gas access hole may be caulked with caulk with a minimum of 300° F continuous exposure rating or stuffed with noncombustible, unfaced insulation to prevent cold air infiltration.
- Ensure that gas line does not come in contact with outer wrap of the appliance. Follow local codes.
- Pipe incoming gas line into valve compartment.
- Connect incoming gas line to the 1/2 in. (13 mm) connection on manual shutoff valve.

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

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

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

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

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

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

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

## D. High Altitude Installations

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

When installing above 2000 feet elevation:

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



### A. Wiring Requirements

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

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

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

#### **B. Intellifire Ignition System Wiring**

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

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

- Refer to Figure 13.1, Intellifire Pilot Ignition (IPI) Wiring Diagram.
- This appliance is equipped with an Intellifire control valve which operates on a 3-volt system.
- Plug the 3-volt AC transformer into the appliance junction box to supply power to the unit OR install two D cell batteries (not included) into the battery pack before use.

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

## **C. Optional Accessories Requirements**

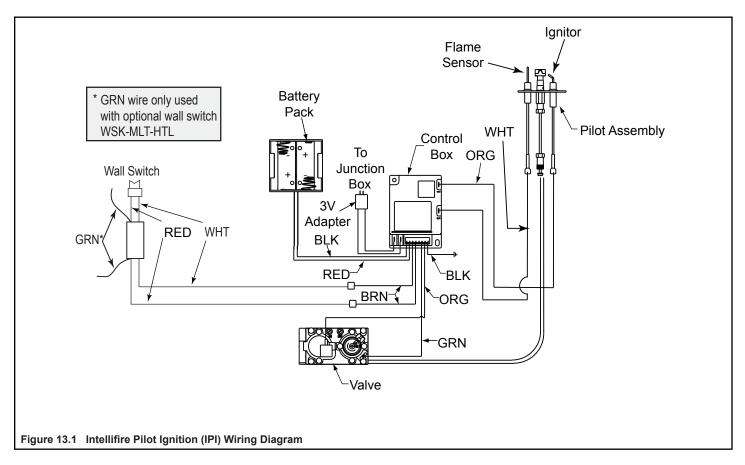
This appliance may be used with a wall switch, wall mounted thermostat and/or a remote control.

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

#### **D. Electrical Service and Repair**

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

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



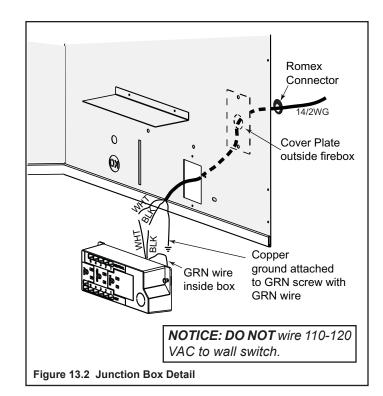
#### E. Junction Box Installation

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 13.2).
- Install the supplied Romex<sup>™</sup> connector in the cover plate.

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

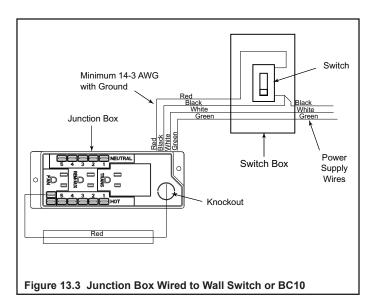
- Remove the screw attaching the junction box/receptacle to the outer shell, rotate the junction box inward to disengage it from the outer shell (see Figure 13.2).
- Pull the electrical wires from outside the appliance through this opening into the valve compartment. See Figure 13.2.



#### 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 13.3):

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

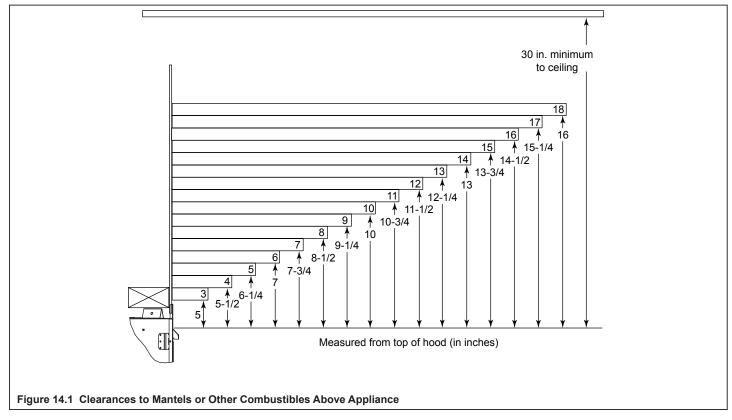




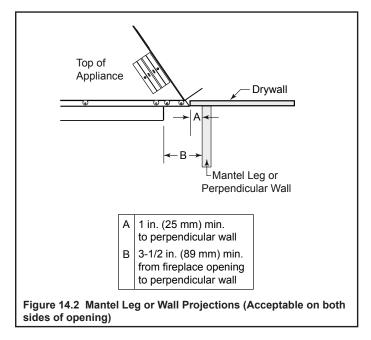
#### A. Mantel and Wall Projections

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

#### **Mantels**



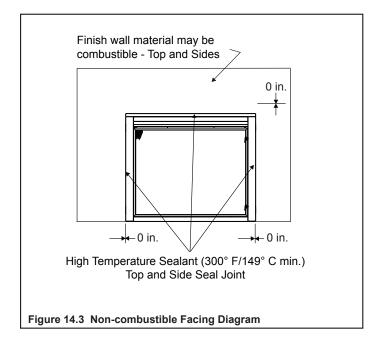
#### Mantel Legs or Wall Projections



#### **B. Facing Material**

- Cover the metal front faces with non-combustible materials only.
- Facing and/or finishing materials must not interfere with air flow through louvers, operation of louvers or doors, or access for service.
- Facing and/or finishing materials must never overhang into the glass opening.
- Observe all clearances when applying combustible materials.
- Seal joints between the finished wall and appliance top and sides using a 300 °F minimum sealant. Refer to Figure 14.3.

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





## A. Remove the Packaging

Remove the shrink film, corrugated top cap, bottom cap and column protectors from the appliance. The appliance should look as shown in Figure 15.1.



Figure 15.1 Appliance Unwrapped

## B. Remove Screen Package Assembly

Grasp the top of the screen package and lift up to remove. See Figures 15.2 and 15.3.



Figure 15.2 Lift up on Screen Package

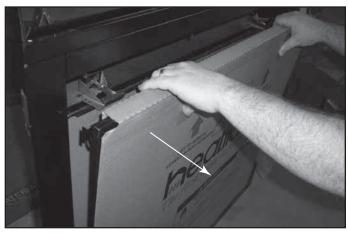


Figure 15.3 Remove Screen Package

### C. Remove the Shipping Materials

Remove the shipping materials from inside or underneath the firebox.

### D. Removing Fixed Glass Assembly

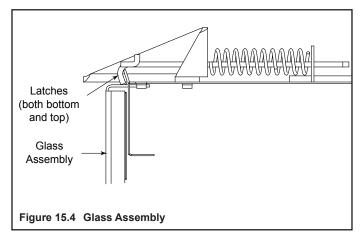
**WARNING! Risk of Asphyxiation!** Handle fixed glass assembly with care. Inspect the gasket to ensure it is undamaged and inspect the glass for cracks, chips or scratches.

#### DO NOT:

- Strike, slam or scratch glass.
- Operate fireplace with glass removed, cracked, broken or scratched.

Replace fixed glass assembly as a complete assembly.

- Remove screen.
- Pull the four (30/33/36 in. appliances) or seven (42 in. appliance) glass assembly latches out of the groove on the glass frame. Refer to Figure 15.4.
- Remove the glass assembly from the appliance.



#### E. Clean the Appliance

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

#### F. Accessories

Install approved accessories per instructions included with the accessories. Refer to Section 17.

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

#### G. Place the Rockwool

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

- Rockwool is shipped with this gas appliance.
- Place a small amount of 1/2 in. diameter pieces (dimesize) rockwool on the burner pan so that the rockwool touches, but does not cover, the holes in the burner pan (refer to Figure 15.5). This will provide the "glowing embers" look.
- It is not necessary to use the entire bag. Save the remaining rockwool for future use.

#### H. Place the Lava Rock

Place the lava rock in an even layer just heavy enough to cover the metal surface. Stay within the zone indicated in Figure 15.5. It is not necessary to use the entire bag. Save the remaining amount for future use.

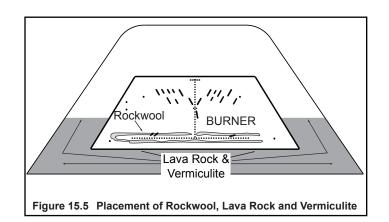
## **A** WARNING

#### **RISK OF EXPLOSION!**

- Place lava rock according to instructions.
- Do NOT place lava rock on burner top.
- Do NOT place lava rock in a position that they may fall into pilot area.
- Improperly placed lava rock interferes with proper burner operation.

Delayed ignition could occur.

- Use ONLY Hearth & Home Technologies-approved lava rock.
- Some models may not require use of entire contents of bag.



#### I. Place the Vermiculite

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

#### J. Replacing Fixed Glass Assembly

- Set the glass panel on the lower two or four glass assembly latches, ensuring the glass panel is centered in the opening.
- Replace glass latches. See Figure 15.4.

#### K. Air Shutter Setting

Air shutter setting should be adjusted by a qualified installer at the time of installation.

- The air shutter is set at the factory for minimum vertical vent run.
- Adjust air shutter for longer vertical runs. See Figure 15.6.
- Turn the thumbscrew to open and close.

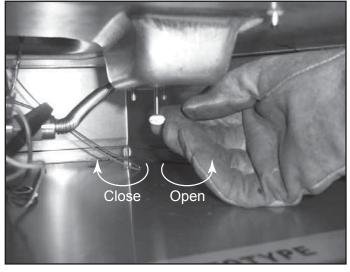


Figure 15.6 Adjusting Air Shutter

#### L. Remove Screen Protector

- Cut the tape on top of the screen protector. See Figure 15.7.
- Open the screen protector and remove the screen. See Figure 15.8.



Figure 15.7 Cut Packaging Tape

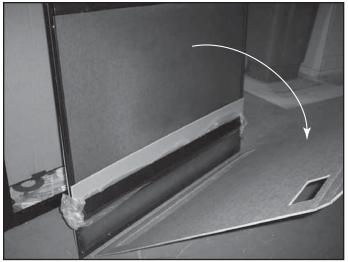


Figure 15.8 Remove Screen Protector

#### M. Unpackage the Hood

Remove parts package from appliance as shown in Figure 5.9.

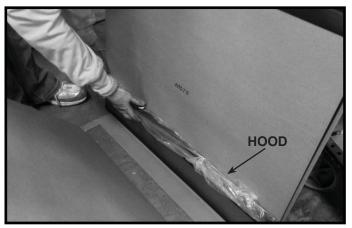


Figure 15.9 Removing Hood

#### N. Install Hood

- Locate the four screws just inside the upper section of the appliance.
- Slide the hood into position under the screw heads.
- Tighten the four screws. See Figure 15.10.

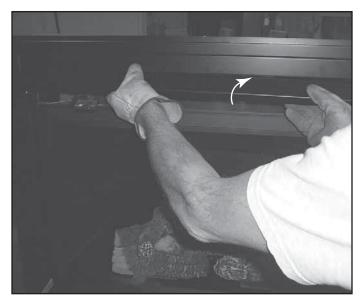


Figure 15.10 Installing Hood

#### **O. Close the Screen Assembly**

- Make sure the screen magnetic touch latches are in the open position. See Figure 15.11.
- Hang the screen on the shoulder screws in the columns. See Figure 15.12.

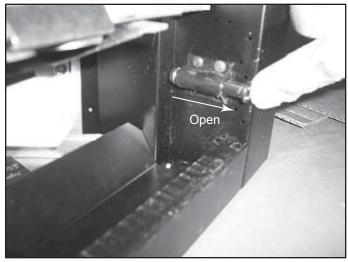


Figure 15.11 Magnetic Touch Latch Open



Figure 15.12 Hang Screen

- Rotate the screen in at the bottom until it touches the magnetic touch latches. See Figure 15.13.
- Press in on the bottom of the screen until the magnetic touch latches close. See Figure 15.14.

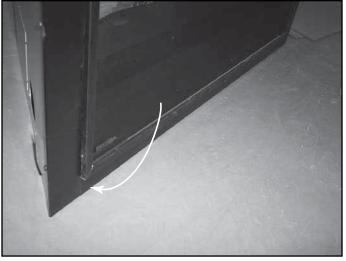


Figure 15.13 Rotate the Screen Down

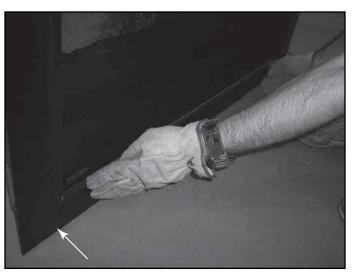


Figure 15.14 Press on Bottom of Screen

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 technician in the diagnosis of a problem and the corrective action to be taken. This troubleshooting guide can only be used by a qualified technician. Contact your dealer to arrange a service call by a qualified technician.

## A. Intellifire<sup>™</sup> Ignition System

Symptom	Possible Cause	Corrective Action				
1. Pilot won't light. The ignitor/module makes noise, but no spark.	A. Incorrect wiring.	Verify "S" wire (white) for sensor and "I" wire (orange) for ignitor are connected to correct terminals on module and pilot assembly.				
	B. Loose connections or electrical shorts in the wiring.	Verify no loose connections or electrical shorts in wiring from module to pilot assembly. Verify connections underneath pilot assembly are tight; also verify connections are not grounding out to metal chassis, pilot burner, pilot enclosure, mesh screen if present or any other metal object.				
	C. Ignitor gap is too large.	Verify gap of igniter to right side of pilot hood. The gap should be ap- proximately .095 in. (2.41 mm) to .135 in. (3.43 mm).				
	D. Module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place a grounded wire about 3/16 in. (5 mm) away from "I" terminal on module. Place ON/OFF rocker switch or wall switch in ON position. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode. Replace pilot if necessary.				
<ol> <li>Pilot won't light, there is no noise or spark.</li> </ol>	A. No power or power supply installed incorrectly.	Verify that power supply is installed and plugged into module. Check voltage of power supply under load at spade connection on module with ON/OFF switch in ON position. Acceptable readings of a good power supply are between 3.2 and 2.8 volts AC.				
		Remove and reinstall the wiring harness that plugs into module. Verify there is a tight fit. Verify pilot assembly wiring to module. Remove and verify continuity of each wire in wiring harness. Replace any damaged components.				
	C. Improper wall switch wiring.	Verify that 110/VAC power is "ON" to junction box.				
	D. Module not grounded.	Verify black ground wire from module wire harness is grounded to metal chassis of appliance.				
	E. Module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF rocker switch or wall switch in ON position. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode.				
3. Pilot sparks, but Pilot will not light.	A. Gas supply.	Verify that incoming gas line ball valve is "open". Verify that inlet pressure reading is within acceptable limits.				
	B. Ignitor gap is incorrect.	Verify gap of igniter to right side of pilot hood. The gap should be a proximately .095 in. (2.41 mm) to .135 in. (3.43 mm).				
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance.				
	D. 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.				
		<u> </u>				

## Troubleshooting (continued)

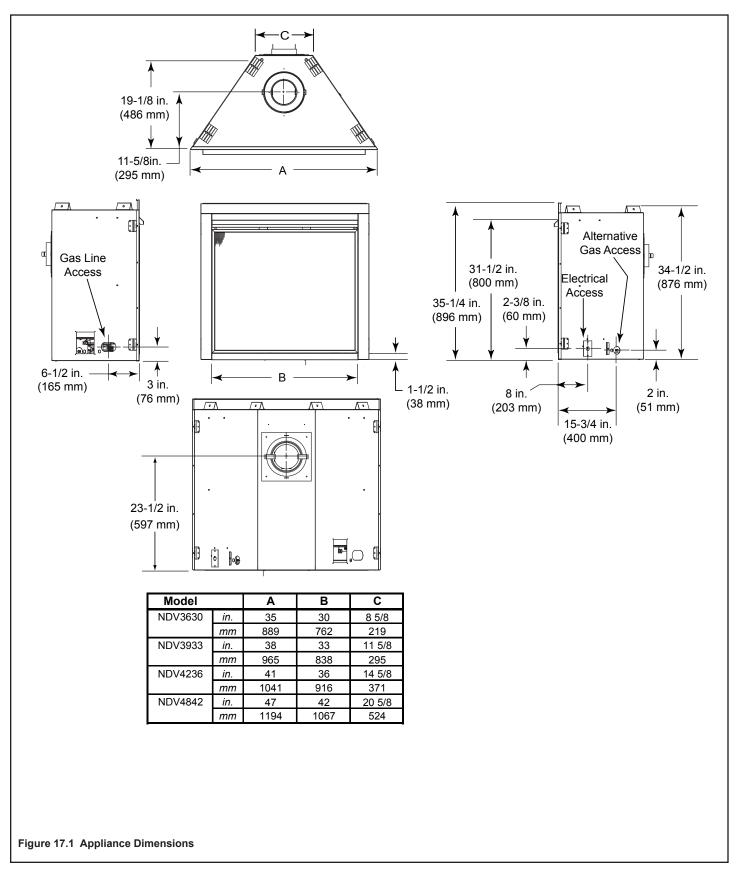
## Intellifire Ignition System - (continued)

Symptom	Possible Cause	Corrective Action	
4. Pilot lights but continues to spark, and main burner will not ignite. (If the pilot continues to spark after the pilot flame has been lit, flame rectification has not occurred.)	A. A shorted or loose connection in flame sensing rod.	Verify all connections to wiring diagram in manual. Verify connections underneath pilot assembly are tight. Verify connections are not grounding out to metal chassis, pilot burner, pilot enclosure or screen if present, or any other metal object.	
	B. Poor flame rectification or contaminated flame sensing rod.	With fixed glass assembly in place, verify that flame is engulfing flame sensing rod on left side of pilot hood. Flame sensing rod should glow shortly after ignition. Verify correct pilot orifice is installed and gas inlet is set to pressure specifications.	
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance. Verify that wire harness is firmly connected to the module.	
	D. Damaged pilot assembly or contaminated flame sensing rod.	Verify that ceramic insulator around the flame sensing rod is not cracked, damaged, or loose. Verify connection from flame sensing rod to white sensor wire. Clean flame sensing rod with emery cloth to remove any contaminants that may have accumulated on flame sensing rod. Verify continuity with a multimeter with ohms set at lowest range. Replace pilot if any damage is detected.	
	E. Module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF rocker switch or wall switch in ON position. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine.	

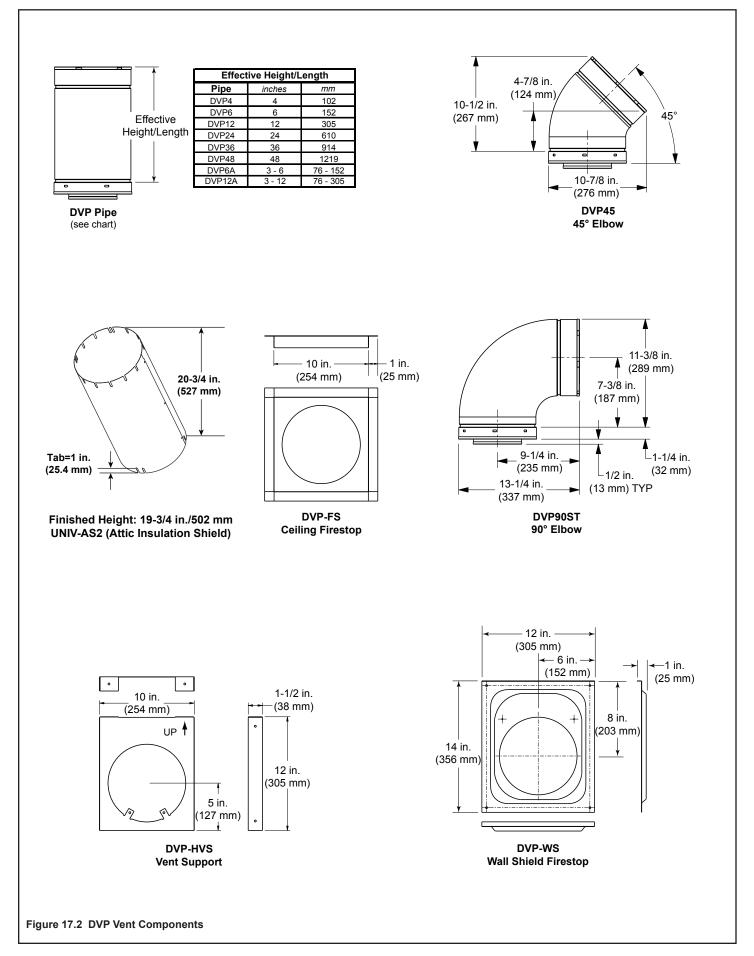
# **17** Reference Materials

#### A. Appliance Dimension Diagram

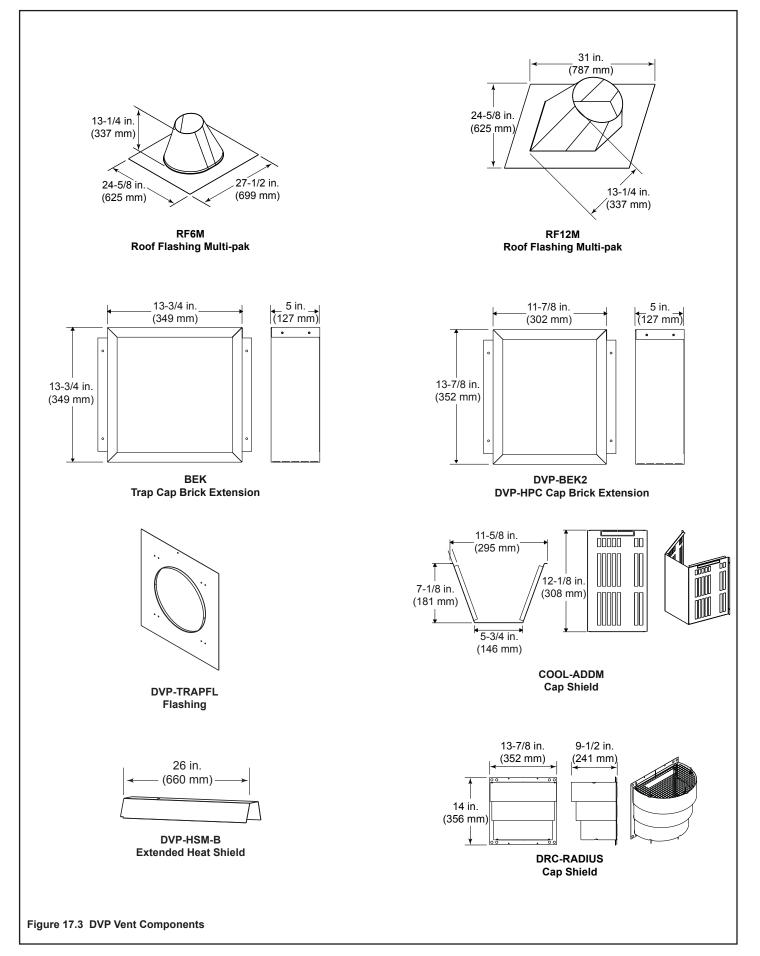
Dimensions are actual appliance dimensions. Use for reference only. For framing dimensions and clearances refer to Section 3.



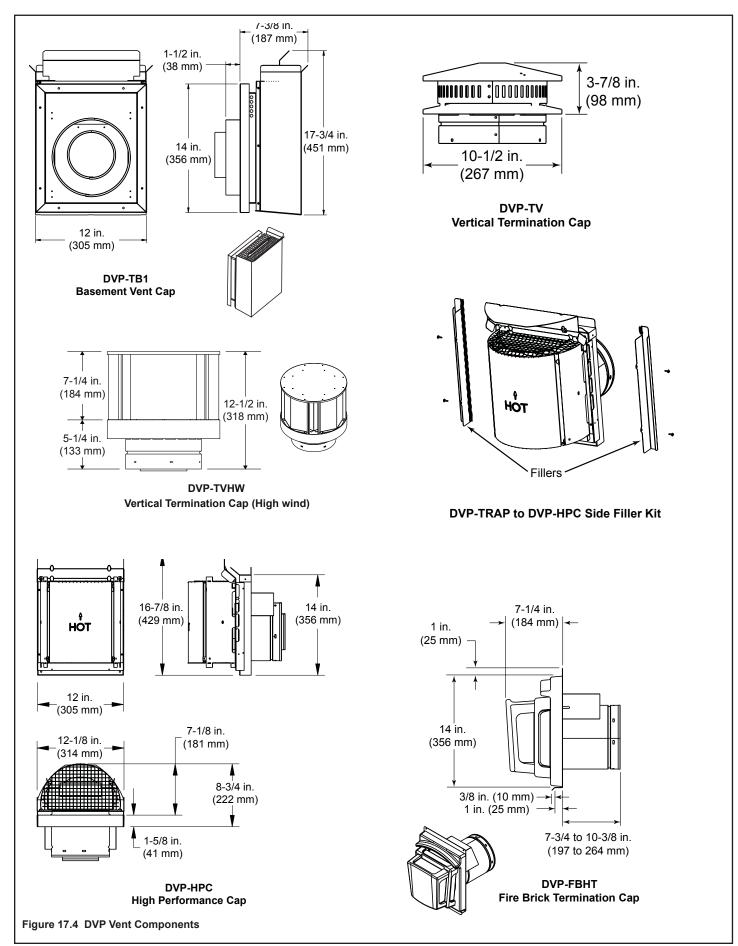
#### **B. Vent Components Diagrams**



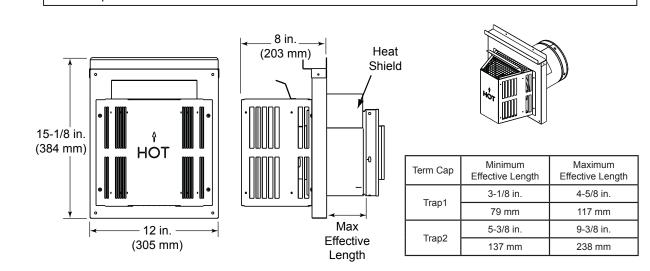
#### B. Vent Components Diagrams (continued)



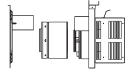
#### B. Vent Components Diagrams (continued)



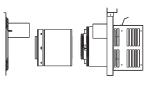
Note: Heat shields MUST overlap by a minimum of 1-1/2 in. (38 mm). **The heat shield is designed to be used on a wall 4 in. to 7-1/4 in. (102 mm to 184 mm) thick.** If wall thickness is less than 4 in. (102 mm) the existing heat shields must be field trimmed. If wall thickness is greater than 7-1/4 in.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



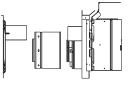
DVP-TRAP Horizontal Termination Cap



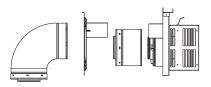
DVP-TRAP1



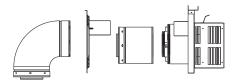
**DVP-TRAP2** 



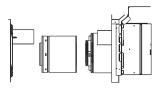
DVP-HPC1



DVP-TRAPK1

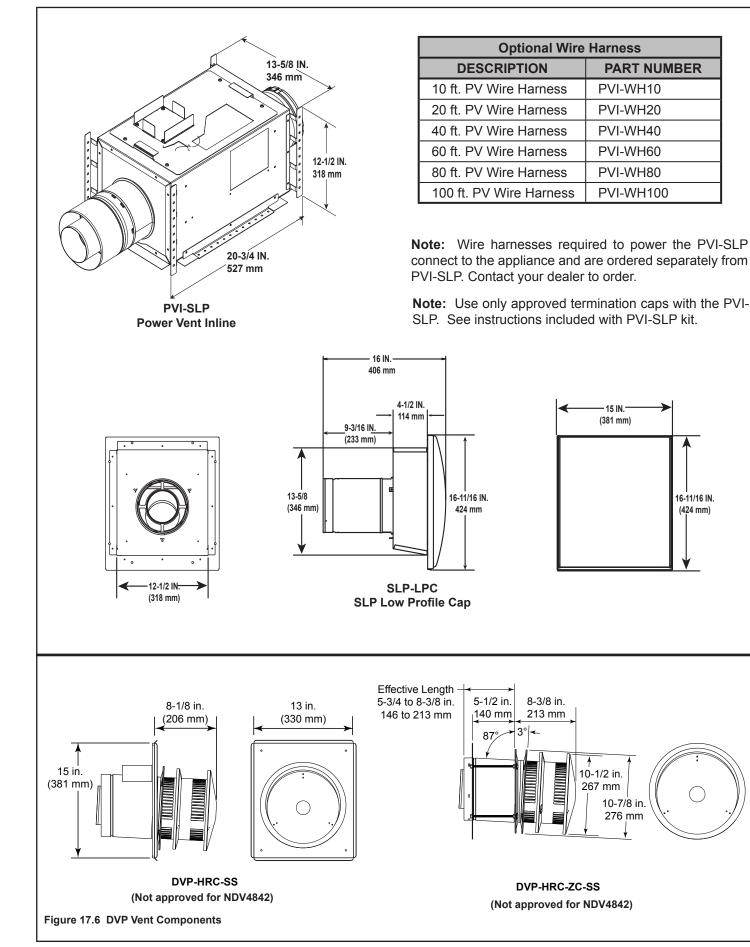


**DVP-TRAPK2** 



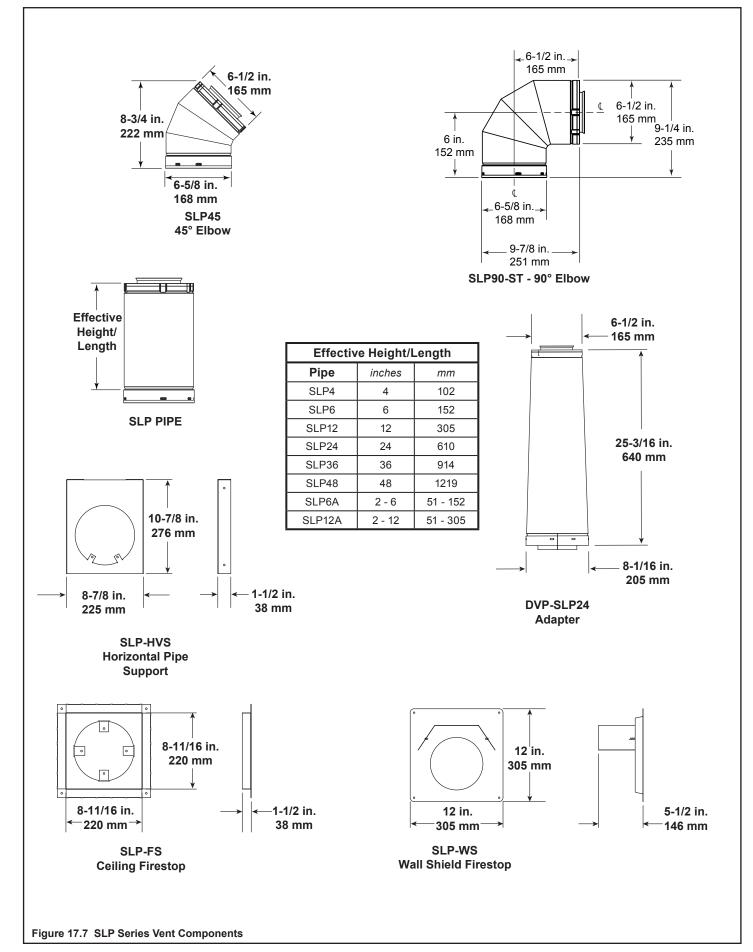
DVP-HPC2

Figure 17.5 DVP Vent Components

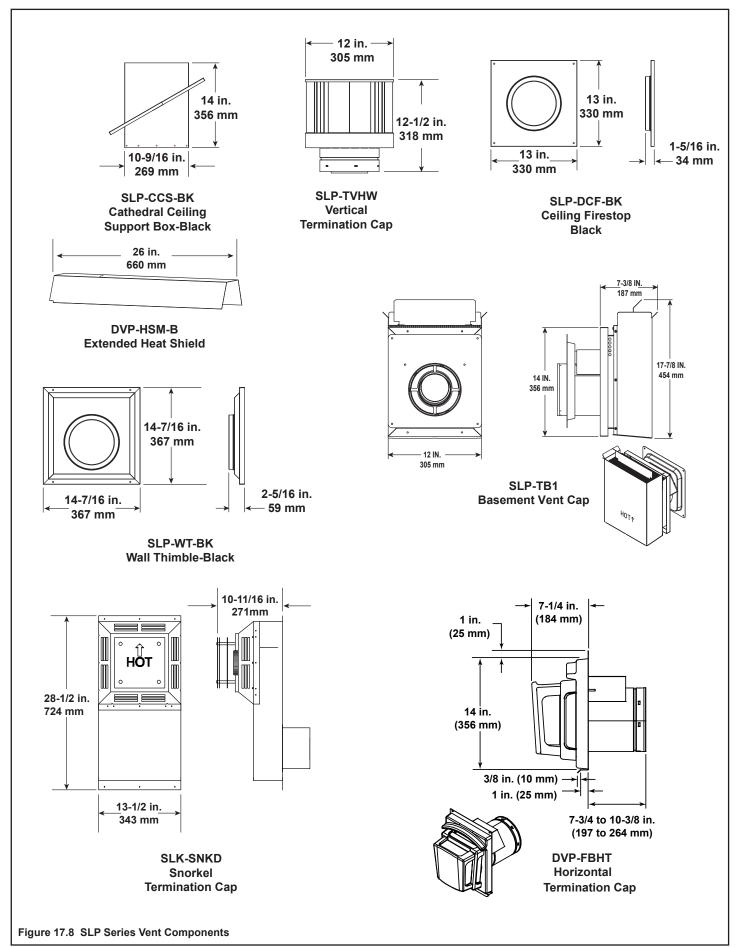


16-11/16 IN.

(424 mm)



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



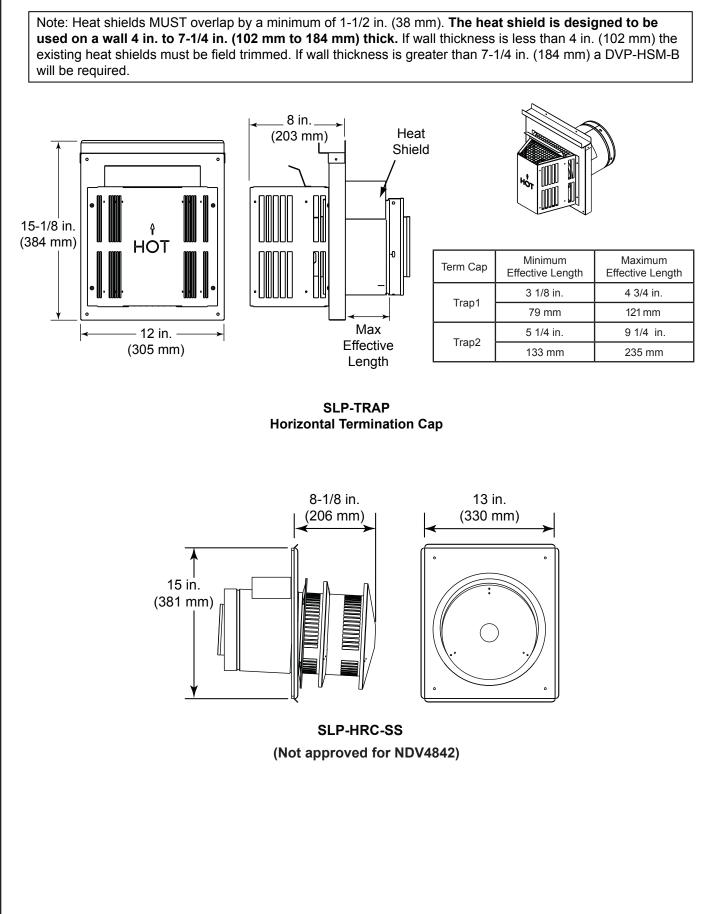


Figure 17.9 SLP Series Vent Components

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

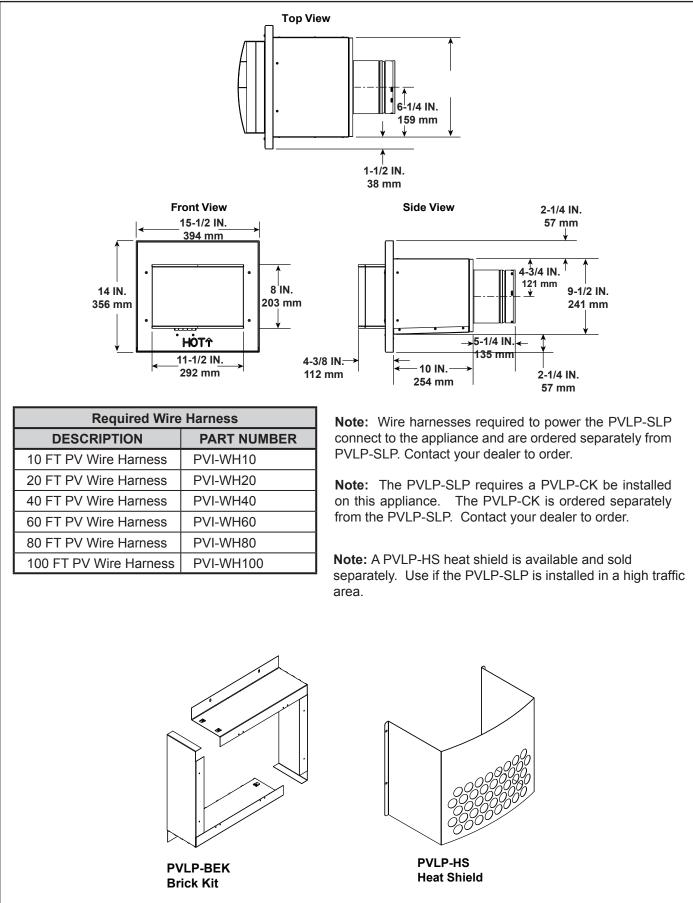
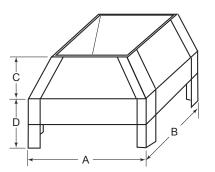


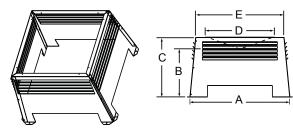
Figure 17.10 PVLP-SLP Vent Components

### **D. Optional Components**



LDS33/LDS46 Decorative Shroud

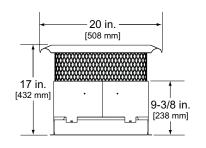
	Α		В		С		D	
Catalog #	in.	mm	in.	mm	in.	mm	in.	mm
LDS33	36	914	36	914	8.5	216	11	279
LDS46	48	1219	72	1829	8.5	216	11	279



LDS-BV Decorative Shroud

Catalog #		Α	В	С	Е	Е
LDS-BV	in.	26	12.5	15.5	22	23
	mm	660	318	394	533	584

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



TCG375 Terra Cotta Cap

LDSCP-M Shroud Leg Multipack (not shown)

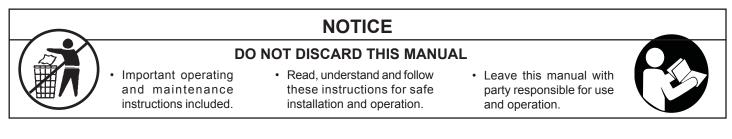
#### **E.** Contact Information



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

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

#### - NOTES -



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

2000-945C